# NANPA TECHNICAL REQUIREMENTS DOCUMENT

(Description/Specifications)

**NOVEMBER 2010** 

# **Table of Contents**

Se	ection	Page
1.		
Intro	ductionduction	1-1
1.1	Purpose	1-1
1.2	Scope	1-1
1.3	Background	1-1
1.4	Attributes	1-2
1.5	Environment	1-4
	1.5.3 Industry Activities	
Gener	ral Requirements	2-1
	High-Level Requirements	
_,_	2.1.1 Assigning and Administering NANP Resources	
	2.1.2 Accommodating Current and Future Numbering Needs	2-1
	2.1.3 Administrative Resources for Legal, Financial, and Technical Responsibili	
	2.1.4 Comparising Comparison of Department of the Comparison Department of the Comparison Department of the Comparison o	
	2.1.4 Supervision for All Services and Responsibility for Achieving Performanc Objectives	
2.2	Relationships	
2.2	2.2.1 United States	
	2.2.2 International	
2.3	Administration and Management	
2.5	2.3.1 Requests for Numbering Resources	
	2.3.2 Service Provider and Regulator Support	
	2.3.3 Numbering Resource Optimization	
2.4	Cost Allocation	2-3
2.5	Staffing	2-4
2.6	Telecommunications Requirements	2-4
	Daily Operations	
2.1	2.7.1 Inquiry Response	
	2.7.2 Emergency Notifications	

2.7.3 Holidays	2-5
2.8 Physical Location	2-5
2.9 Travel	2-6
2.10 Modification of Guidelines	2-6
2.11 Audits	2-7
2.11.1 For Cause Audits of Service Providers	2-7
2.11.2 Other Audits of Service Providers	2-7
2.12 Dispute Resolution.	2-7
2.13 Data Security	2-8
2.13.1 Limited Access	
2.13.2 Physical Security	
2.13.3 Site Visits	
2.13.4 Data Accessibility	
2.13.5 Unauthorized Access	
2.14 Implementation Plan	2-10
2.15 NANPA Transition to Successor	
2.15.1 Transfer Efficiency	
2.15.2 Technical Support	
2.15.3 Documentation	
2.15.4 Transition Plan	
2.16 Term of Administration	2-11
2.17 Interfaces	
2.17.1 Interface With the Pooling Administrator	
2.17.2 Interface With BIRRDS	
<ul><li>2.17.3 Interface With the Number Portability Administration</li><li>2.17.4 Interface With the Service Providers</li></ul>	
2.17.4 Interface With the Service Providers	
2.17.6 Interface With the State Regulatory Agencies	
2.17.7 Interface With the Media	
2.17.8 Interface With the ITU Technical Standards Bureau	2-13
2.17.9 Interface With the ITU Study Group 2	2-13
2.18 Mobile Identification Number Block Identifier Administrator	2-13
2.18.1 MBI Resources	
2.18.2 NPA Splits	2-13
NANP Administration	3-1
3.1 Numbering Plan Areas (NPAs)	3-1

3.2 Central Office (CO) Codes	3-2
3.3 International Inbound NPA-456 NXX Codes	3-2
3.4 Personal Communications Service (PCS) NPA Codes	3-2
3.5 Easily Recognizable Code (ERC) Code 900 NXX Codes	3-2
3.6 N11 Service Codes	
3.7 Hearing Impairment Codes-800 855 XXXX Line Numbers	3-3
3.8 Information Services Codes-555 XXXX Line Numbers	
3.9 Carrier Identification Codes (CICs)	3-4
3.10 Vertical Service Codes (VSC)	3-4
3.11 Automatic Number Identification (ANI) II Digits	3-5
Central Office Code Administration	
4.1 Requirements	4-1
4.2 Functional Specifications	
4.2.1 User Services	
4.2.2 Processing	4-2
4.2.3 Communication/Notification Functions	
4.2.4 Status Reporting	
4.2.5 Tracking CO Code Utilization for NPA Relief	
4.2.6 Management of Jeopardy Conditions	4-3
4.3 Management of the Code Inventory	4-4
4.4 Resource Reclamation	4-4
NPA Relief Planning	5-1
5.1 Key Responsibilities	5-1
5.1.1 Relief Timing	
5.1.2 Relief Planning Communication	
5.1.3 Initial Planning Document (IPD) Preparation and Dis	
5.1.4 Relief Planning Meetings	
5.1.5 Relief Planning Report	5-2
5.1.6 Relief Planning Consensus Building	5-2
5.1.7 Neutral Facilitator Role	5-2
5.1.8 Proactive Role in Relief Planning	
5.1.9 Status Reporting on Relief Plans	
5.1.10 Possible Testimony	
5 1 11 New NPA Code Assignment	5_2

	5.1.12 Implementation Scheduling	5-3
	5.1.13 Industry Scheduling	5-3
	5.1.14 Press Release	
	5.1.15 Implementation Assistance	5-3
	5.1.16 Compliance	5-3
5.2	User Notification	5-4
Utiliz	zation and Forecasting	6-1
6.1	Responsibilities	6-1
	6.1.1 Point of Contact	6-1
	6.1.2 Contact List Maintenance	6-1
	6.1.3 Data Requests	6-1
	6.1.4 Data Requests in Pooled Areas	6-1
	6.1.5 Data Analysis	
	6.1.6 Data Reporting	
	6.1.7 User Support	
	6.1.8 Data Aggregation	
	6.1.9 Request to Review Data	
	6.1.10 Penalties for Non-Submission	
	6.1.11 Report Anomalies	
	Development of Tests for Anomalies and Inconsistencies	
6.3	NANPA Analysis of Data	
	6.3.1 Methodology for Projecting NPA Exhaust	
	6.3.2 Minimum Analysis Requirements	
	6.3.3 Anomalies and Trends	6-5
6.4	Number Resource Utilization Form (NRUF) Submissions	6-5
Auto	mated System Support	7-1
7.1	System Characteristics	7-1
	7.1.1 System Availability	7-1
	7.1.2 System Query Capability	
	7.1.3 System Scalability	7-2
7.2	System Capabilities	7-2
7.3	System Location	7-2
	7.3.1 Facility Characteristics	
7.4	System Data	7-3
	7.4.1 Data Integrity	
	7.4.2. Confidential Treatment	7-3

7.4	.3 Automated Submittal	.7-3
7.4	.4 Automated Data Output Capabilities	.7-3
	.5 Mechanized Interface with the Pooling Administrator	
7.4	.6 Alternative Data Capabilities	.7-4
7.5 Sys	tem Maintenance	.7-4
7.6 Sys	tem Security	.7-4
7.7 Sys	tem User Profile Application	.7-4
	.1 User Logon System	
7.7	.2 Logon System Access	.7-4
	.3 Logon System Approval	
7.7	.4 Logon System Security Level	.7-5
7.7	.5 Logon System Password	.7-5
	.6 Logon System Problems	
7.7	.7 User Access Permission Classes	.7-5
	.8 Password Changes	
7.7	.9 Unauthorized Client User System Access	.7-5
7.8 Sys	tem Inspection	.7-5
	.1 Report Distribution	
	elp Desk	
	0.1 Contact	
	0.2 Help Desk Referrals	
	0.3 Help Desk Actions	
	•	
•	rstem Generated Notifications	
7.1	1.1 Customized Notifications	.7-8
7.12 Sy	stem Testing	.7-8
7.1	2.1 System Test Results	.7-8
7.13 Sy	stem Disaster Recovery	.7-8
7.14 Sy	stem Backup	. 7-8
7.15 Sy	stem and Equipment Inventory	.7-9
7.16 Sy	stem Documentation Plan	.7-9
7.17 N	ANP Administration System Transfer to Successor	.7-9
	7.1 Transfer Efficacy	
	7.2 System Software Source Code Escrow	
	7.3 System and Equipment Transfer	
	pols	
		7-10 7-10

	7.18.2 CO Codes	7-11
	7.18.3 NPA Exhaust Relief Planning	
	7.18.4 Federal and State Directives/Orders	
	7.18.5 Federal and State Code Conservation Data	
	7.18.6 CIC Access and Usage Report Processing	
	7.18.7 Contact Information	7-13
7.	19 Web Site	7-13
	7.19.1 Web Site Content	7-13
	7.19.2 Content Posting	
	7.19.3 Web Site Design	
	7.19.4 Availability and Access	
	7.19.5 System Responsiveness	
	7.19.6 Out-of-Service	
	7.19.7 Out-of-Service Notification	
	7.19.9 Maintenance of NANC Chair Web Site	
_		
Rep	orting	8-1
8.	1 Annual Report	8-1
8.	2 NRUF Report	8-2
	8.2.1 Data Anomalies	
	8.2.2 Reports to Regulatory Authorities	8-2
8.	3 NPA Relief Activity Status Report	8-4
8.	4 CO Code Activity Status Report	8-5
8.	5 Other NANP Activity and Status Reports	8-5
8.	6 Requests for Additional Reports	8-5
8.	7 Reference Documentation	8-6
8.	8 Standardized Reports for State Commissions	8-6
8.	9 Summary of NANPA Technical Reports	8-7
8.	10 Summary of NANPA Performance Reports	8-9
Aud	lits and Performance Monitoring	9-1
9.	1 Audit by FCC	9-1
	9.11 Staff Support	
	9.12 Office Facilities	9-1
	9.13 Audit Results	9-1
	9.14 Compliance	9-1

9.2 Monitoring		9-2
9.2.1 NANPA Client Feedb	ack Survey	9-2
	rational Review	
	s and Corrective Action	
	nts	
9.5 Self Assessment and Report	ing	9-3
Contract Data Requirements List	t (CDRL)	.10-1
10.1 Implementation Plan		. 10-1
10.2 Security Plan		. 10-1
10.3 Disaster/Continuity of Ope	rations Plan	. 10-1
10.4 NANP Administration Syst	tem Transfer List	. 10-1
10.5 System Test Plan		. 10-1
10.6 Change Management Plan.		. 10-1
10.7 Contract Change Managem	nent Plan	. 10-1
10.8 Training Plan		. 10-2
10.9 System Maintenance Plan		. 10-2
10.10 System Documentation Pl	lan	. 10-2
10.11 Performance Improvemen	t Plan	. 10-2
10.12 Transition Plan		. 10-2
10.13 System Source Code		. 10-2
Enterprise Services		.10-1
11.1 Operating Principles		. 10-1
11.2 Required Enterprise S	Service	. 10-1
11.3 Audit of Enterprise Se	ervices	. 10-1
List of References		. 10-1
$\mathcal{E}$		
FCC Numbering Documents		10 - 3

#### **Section 1**

# Introduction

# 1.1 Purpose

This document defines the North American Numbering Plan (NANP) Administrator's technical, operational, and system requirements and describes the full functionality required of the designated North American Numbering Plan Administrator (NANPA). It also serves as a reference document to other resources, such as industry guidelines, United States Federal Communications Commission (FCC or Commission) orders, technical standards, and technical requirements that support the NANP.

The contractor shall, at the FCC's discretion, perform the duties of the NANPA for up to a five-year term from the date of award.

# 1.2 Scope

This document describes the technical responsibilities of the vendor selected by the FCC to serve as the NANPA. The primary scope of this document is to define the NANPA's performance within the United States.

The NANPA's role in the United States includes the following functional areas: overall NANP Administration, Central Office (CO) Code Administration, Numbering Plan Area (NPA) relief planning, collection and analysis of utilization and forecast data, report generation, and all other related NANP Administration functions. Each of the functions is described further in the document.

# 1.3 Background

The NANP is the basic numbering scheme for the Public Switched Telephone Networks (PSTNs) in the following 19 countries (formerly known as World Zone 1): Anguilla, Antigua & Barbuda, Bahamas, Barbados, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago, Turks & Caicos Islands, and the United States (including Puerto Rico, the U.S. Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands and American Samoa).

The format of the NANP is consistent with International Telecommunication Union (ITU) Recommendation E.164 "The International Public Telecommunication Numbering Plan." The administration of the NANP was originally the responsibility of AT&T until divestiture. At that time, Bellcore was instructed to take over this administrative task. In 1997, this function was awarded to the company that is now Neustar through a competitive bid process conducted at the direction of the FCC.

The term NPA Code refers to an area code that is the first three digits of a telephone number. Each digit in a telephone number is identified by an alphabetical character in the order ABC-

DEF-GHIJ, consisting of a 3-digit NPA (ABC), a 3-digit CO Code (DEF), and a 4-digit Line Number (GHIJ). This is in the format NXX-NXX-XXXX, where: N = digits 2 to 9 and X = digits 0 to 9 (*e.g.*, 613 is the NPA code in the NANP number 613-781-0610). There were 335 geographic NPA codes in service as of January 1, 2008. The number of new area codes assigned in the United States since 1995 is shown in the table below:

Year	Number Assigned
1995	14
1996	11
1997	32
1998	22
1999	43
2000	23
2001	21
2002	3
2003	1
2004	3
2005	2
2006	2
2007	3
2008	6
2009	7

There shall be a transition from the current administrator to the new administrator should the NANPA responsibility be awarded to a new party.

#### 1.4 Attributes

The NANPA's role is to serve as the neutral numbering administrator. The NANPA must comply with the statutory requirements for neutrality and meet the Commission's neutrality requirements, set forth in Commission rule 52.12, 47 C.F.R. § 52.12.

#### Rule 52.12 states:

- (a)(1) Neutrality. The NANPA [] shall be [a] non-governmental entities that [is] impartial and not aligned with any particular telecommunication industry segment. Accordingly, while conducting [] operations under this section, the NANPA shall ensure that [it] compl[ies] with the following neutrality criteria:
- (i) The NANPA [] may not be an affiliate of any telecommunications service provider(s) as defined in the Telecommunications Act of 1996. "Affiliate" is a person who controls, is

controlled by, or is under the direct or indirect common control with another person. A person shall be deemed to control another if such person possesses, directly or indirectly-

- (A) An equity interest by stock, partnership (general or limited) interest, joint venture participation, or member interest in the other person ten (10%) percent or more of the total outstanding equity interests in the other person, or
- (B) The power to vote ten (10%) percent or more of the securities (by stock, partnership (general or limited) interest, joint venture participation, or member interest) having ordinary voting power for the election of directors, general partner, or management of such other person, or
- (C) The power to direct or cause the direction of the management and policies of such other person, whether through the ownership of or right to vote voting rights attributable to the stock, partnership (general or limited) interest, joint venture participation, or member interest) of such other person, by contract (including but not limited to stockholder agreement, partnership (general or limited) agreement, joint venture agreement, or operating agreement), or otherwise;
- (ii) The NANPA [] and any affiliate thereof, may not issue a majority of its debt to, nor may it derive a majority of its revenues from, any telecommunications service provider. "Majority" shall mean greater than 50 percent, and "debt" shall mean stocks, bonds, securities, notes, loans or any other instrument of indebtedness; and
- (iii) Notwithstanding the neutrality criteria set forth in paragraphs (a)(1) (i) and (ii) of this section, the NANPA [] may be determined to be or not to be subject to undue influence by parties with a vested interest in the outcome of numbering administration and activities. []
- (2) Any subcontractor that performs--
- (i) NANP Administration and central office code administration [] must also meet the neutrality criteria described in paragraph (a)(1).

Potential bidders must demonstrate that they meet the Commission's neutrality requirements through submission of a certificate signed by a Chief Executive Officer or President that explicitly certifies the bidder meets each requirement. The successful bidder will be required to re-certify to its compliance at the time of award. Potential bidders, as well as the successful bidder, should be prepared to provide any other documentation verifying compliance as may be requested by the Commission.

The entity selected to be the NANPA must adhere to all Commission neutrality requirements, orders, and policies throughout the term of the contract. In this regard, to avoid potential disruption of national numbering administration, the successful bidder will be required to apprise the Commission of any proposed changes that may affect its neutrality sufficiently in advance to permit review of the proposed changes and Commission determination as to whether any cure would be necessary to ensure NANPA neutrality. Such changes might be,

but are not limited to, changes to organizational or ownership structure, investors, Board of Directors, etc.

The NANPA is the designated independent, neutral entity responsible for assigning and administering NANP resources in an efficient, effective, fair, unbiased, and non-discriminatory manner consistent with regulatory directives and industry guidelines, and is required to comply with state regulatory decisions, rules and orders, as applicable, as long as they are not in conflict with FCC decisions, orders, and rules.

The NANPA shall also ensure that numbering administration in the United States is effective, while using the expertise and innovation of industry to promote number optimization. It also shall support efforts to accommodate current and future numbering needs, and to advise the industry and regulators relative to numbering issues (*e.g.*, potential resource exhaust).

#### 1.5 Environment

#### 1.5.1 Regulatory

The FCC has authority over numbering within the United States. The other NANP member nations exercise similar regulatory jurisdiction.

The FCC has delegated specific authority to state regulatory agencies in the United States. All states have been delegated authority over NPA Relief. In addition, some states have been given authority to trial certain number conservation measures. They have also been granted authority to obtain data, reclaim resources, and establish and enforce number allocation standards.

In the future, regulatory authorities may issue rules, requirements or policy directives, which may increase, decrease or otherwise affect the functions to be performed by the NANPA.

#### 1.5.2 Federal Advisory Committee

The North American Numbering Council (NANC) is a Federal Advisory Committee established pursuant to the United States Federal Advisory Committee Act, 5 U.S.C., App. 2 (1988) (FACA). The NANC was established to advise the FCC on issues related to NANP Administration, and to advise the Commission on local number portability (LNP) administration issues. The NANC develops policy recommendations on numbering issues, initially resolves disputes, and provides guidance to the numbering administrators. The NANC's charter under the FACA provides that, in carrying out its responsibilities, the NANC shall ensure that NANP Administration supports identified policy objectives. The NANC shall ensure that the NANPA:

- Facilitates entry into the communications marketplace by making numbering resources available on an efficient, timely basis to communications service providers.
- Does not unduly favor or disfavor any particular industry segment or group of consumers.
- Does not unduly favor one technology over another.

- Gives consumers easy access to the public switched telephone network.
- Ensures that the interests of all NANP member countries are addressed fairly and efficiently, fostering continued integration of the NANP across NANP member countries.

# 1.5.3 Industry Activities

The industry develops number administration guidelines for the United States based on industry consensus and regulatory direction. The Industry Numbering Committee (INC), operating under the auspices of the Alliance for Telecommunications Industry Solutions (ATIS), is the industry forum established to develop such guidelines.

The mission of the INC is to provide a forum to address and resolve industry-wide technical issues associated with the planning, administration, allocation, assignment and use of numbering resources and related dialing considerations for public telecommunications within the NANP area.

INC guidelines incorporate federal regulatory requirements with technical and operational principals. The guidelines also recognize the existence of specific regulations in states where FCC-delegated authority has been granted.

Industry guidelines and regulatory directives are subject to change throughout the NANPA's Term of Administration.

#### Section 2

# **General Requirements**

This section describes the functions to be performed by the NANPA.

The scope of this document reflects the NANPA's functions, along with FCC rules, FCC orders, state regulatory directives made under FCC-delegated authority, and industry guidelines.

This document describes the functional requirements, administrative tasks, and components of the responsibilities and duties of the NANPA. The bidders shall also refer to related regulatory orders issued by the FCC and states with delegated authority, industry guidelines, technical standards, and NANC-related documentation. A List of References follows Section 11 in this document.

# 2.1 High-Level Requirements

The four high level requirements of the NANPA are indicated below.

# 2.1.1 Assigning and Administering NANP Resources

In accordance with 47 C.F.R. § 52.13(b), the NANPA shall assign and administer NANP resources in an efficient, effective, fair, unbiased, and non-discriminatory manner consistent with regulatory directives and industry guidelines.

#### 2.1.2 Accommodating Current and Future Numbering Needs

The NANPA shall participate in industry efforts to accommodate current and future numbering needs at the NPA level and the NANP level. The NANPA shall advise the regulators and industry relative to numbering issues, potential resource exhaust, and all routing and rating issues that may affect service to users.

In addition to its many day-to-day numbering resource assignment and administrative activities, the NANPA shall provide sufficient focus on long-term planning to ensure the continued viability of the NANP. The NANPA shall update its processes, procedures, systems, and forms to reflect regulatory orders, rules, and directives.

The NANPA shall implement a planned approach utilizing effective forecasting and management tools in order to make everyone aware of the availability of numbering resources to meet current and future needs.

Critical components of NANP Administration include NPA relief planning and providing systems and tools for managing number administration.

# 2.1.3 Administrative Resources for Legal, Financial, and Technical Responsibilities

The NANPA shall maintain necessary administrative resources to handle the legal, financial, and technical responsibilities required to manage all numbering resources.

# 2.1.4 Supervision for All Services and Responsibility for Achieving Performance Objectives

The NANPA shall provide management supervision for all of the services it provides, including responsibility for achieving performance objectives. The establishment of these objectives is a collaborative effort between the NANPA, the FCC, state commissions, the NANC, and the INC.

# 2.2 Relationships

#### 2.2.1 United States

The NANPA shall establish and maintain relationships within the United States with entities such as the FCC, other federal agencies, and state regulatory authorities, as appropriate. The NANPA shall cooperate with and actively participate in policy and technical numbering bodies and industry forums, such as the NANC and its subtending groups, and the INC.

#### 2.2.2 International

The NANPA shall develop and maintain communications with all other NANP member countries to ensure that their numbering needs are met.

The NANPA shall attend U.S. Department of State Study Group A meetings. In addition, the NANPA shall maintain a working knowledge of ITU Study Group 2 activities for the benefit of the U.S. telecommunications industry.

Attendance at international meetings is not covered by the scope of this contract.

# 2.3 Administration and Management

The NANPA shall manage the NANP in accordance with the most current regulatory directives and policies and published industry guidelines.

Occasions may arise where decisions and interpretations are required on issues that have not yet been addressed. The NANPA shall have the knowledge and capability to recognize these instances and refer them to the appropriate body for resolution.

The NANPA shall perform as the steward of the numbering resources. In this capacity, the NANPA shall monitor the status of resources in all areas of the NANP and take appropriate action to ensure the timely availability of numbering resources.

# 2.3.1 Requests for Numbering Resources

Applications for numbering resources shall be submitted to the NANPA by service providers via the Internet, facsimile, or the U.S. Mail. The NANPA shall use a standard electronic format for application transmissions. All applications received by the NANPA shall, in turn, generate a confirmation back to the submitting service provider.

The NANPA shall review requests for numbering resources (e.g., NPAs, central office codes) for accuracy and appropriateness per FCC requirements and industry guidelines.

#### 2.3.2 Service Provider and Regulator Support

The NANPA shall serve as the information resource for regulatory bodies and the industry concerning numbering resource issues related to NANP Administration (*e.g.*, ITU E.164 Recommendation, NANP, NANP Administration, regulatory issues affecting numbering, number resource assignment guidelines, CO Code administration, and relief planning and relevant international numbering issues).

The NANPA shall respond to inquiries about the numbering plan. The NANPA shall provide, upon request, information on how to obtain current documents and forms related to NANP Administration (including application for automated access to its systems and all other materials needed to properly request the assignment or disconnect of numbering resources, or change of numbering data) by referring requesters to specific NANPA web pages where they can download electronic copies or other sources as appropriate (e.g., to the FCC, state commissions, the INC). The NANPA shall provide copies of documents it generates by facsimile or U.S. Mail if the document is not available via the Internet. A list of documents related to NANP Administration is provided in the List of References following Section 11 in this document.

#### 2.3.3 Numbering Resource Optimization

The NANPA shall provide assistance to users of numbering resources and suggest alternatives, when possible, that shall optimize numbering resource utilization. The NANPA shall coordinate its numbering resource activities with the Canadian Number Administrator and other NANP member countries' administrators to ensure efficient and effective management of NANP numbering resources.

The NANPA shall be knowledgeable regarding numbering resource optimization methods (*e.g.*, rate center consolidation, individual telephone number pooling, thousands- block number pooling) and the potential impact upon the NANP itself. The NANPA shall remain completely neutral and shall not take a position that favors one numbering resource optimization method over another.

The NANPA shall not take independent action with respect to adoption of optimization methods that are not within existing guidelines or regulatory directives. However, the NANPA shall recognize optimization opportunities and bring this information to the attention of the appropriate body for consideration. The NANPA shall remain cognizant of its obligation to remain neutral.

#### 2.4 Cost Allocation

The Billing and Collection Agent shall determine the final allocation methodology for sharing costs between NANP countries in accordance with the Billing and Collection Agent Requirements Document, or appropriate regulatory documentation. Should cost allocation disputes arise, the Billing and Collection Agent shall request FCC guidance. In no circumstances shall the NANPA decide on its own the cost methodology or allocation between and among NANP member countries.

# 2.5 Staffing

The NANPA shall maintain the necessary staffing levels to support industry and regulatory work relevant to the management of all NANP numbering resources.

The NANPA shall maintain necessary administrative resources to handle the legal, financial, and technical responsibilities connected with the management of all numbering resources. The NANPA shall maintain the necessary equipment (*e.g.*, inventory systems, facilities, and

The NANPA shall maintain the necessary equipment (e.g., inventory systems, facilities, and proper billing arrangements associated with day-to-day management of numbering resources) to support this staff.

All employees and subcontractors of the NANPA who have access to a service provider's confidential information shall execute a non-disclosure agreement that remains in effect following the termination of employment.

Subcontractors may be used to perform work under this, or subsequent, Terms of Administration.

# 2.6 Telecommunications Requirements

The NANPA shall have voice and data capabilities in order to communicate with all clients and the public concerning NANP Administration.

Each NANPA staff member who has responsibilities for interfacing with clients shall be reachable directly by those clients.

The telephone system shall provide the capability to allow a caller to easily leave a message. This may be accomplished by an electronic messaging system that allows the caller to leave a message for the person called.

The NANPA shall maintain read/write access to routing and rating databases.<sup>1</sup> This can be accomplished through a GUI interface. The NANPA shall also have access to the information contained in the Local Exchange Routing Guide (LERG) or an equivalent. The NANPA shall maintain access to Number Portability Administration Center (NPAC) data the NANPA needs to perform its responsibilities. The data shall be obtained from the NPAC administrator per the details defined by the North American Portability Management, Limited Liability Corporation (LLC) that oversees the vendor of the local number portability systems and administration or as otherwise provided by FCC requirements.

# 2.7 Daily Operations

The NANPA shall be available a minimum of five business days per week (Monday through Friday), eight hours per day during the business hours of its clients. However, since the NANP service area covers several time zones, the NANPA shall provide a mechanism (*e.g.*,

<sup>1</sup> The Business Integrated Routing and Rating Database System, BIRRDS, is a Telcordia system that the industry uses to provide input access to the LERG. The LERG is the Local Exchange Routing Guide that contains the rating and routing information for assigned CO Codes.

voicemail, e-mail, facsimile) to be accessible on a 24-hour basis in order to meet the needs of all of its clients.

The NANPA shall maintain a log of all client contacts for review by the Auditor and other parties as designated by the FCC.

# 2.7.1 Inquiry Response

The NANPA shall respond within the next business day (to be defined in the time zone where the inquiry was originated) to general inquires or questions.

The NANPA shall monitor and report on its customer response rates. This report shall be furnished upon request and used to review the NANPA's customer service activities per the annual performance review process.

#### 2.7.2 Emergency Notifications

The NANPA shall be called upon to provide industry notification outside of the accepted timeframes defined in industry guidelines. These notifications shall be issued as appropriate and necessary depending on the circumstances.

#### 2.7.3 Holidays

The NANPA shall observe U.S. holidays. The following is a list of holidays that the NANPA shall observe:

- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Day after Thanksgiving\*
- Christmas Day

NANPA shall be open for business on all other business days.

On an annual basis, the NANPA shall post a list of the holidays observed and the calendar dates of those holidays on the NANPA web site.

# 2.8 Physical Location

The physical location of the NANPA facility(s) is at the discretion of the contractor. The NANPA shall notify clients and the public, by appropriate means, prior to any facility relocation or telephone number change.

<sup>\*</sup> Not open for business but the Help Desk shall be open and this shall be considered a business day for day counts on processing.

#### 2.9 Travel

NANPA staff shall travel, when necessary, to meet the needs of the NANPA (*e.g.*, to NANC meetings, INC meetings, NPA jeopardy situations, NPA relief planning meetings, or as otherwise necessary to comply with FCC requirements).

#### 2.10 Modification of Guidelines

The NANPA shall participate in the development and modification of guidelines and procedures, which may affect the performance of the NANPA functions. These changes may come from regulatory directives and/or modifications to guidelines. In addition, new guidelines may be developed as appropriate to comply with regulatory directives. The NANPA shall adopt and implement any changes that are consistent with regulatory directives after they are officially adopted, recognizing that some may constitute a change in the scope of work.

#### The NANPA shall:

- Provide, in real time, technical guidance to ensure processes and procedures are effective in meeting the goals of the change.
- Assess and share in real time the cost implications and administrative impact upon the NANPA duties and responsibilities.
- Provide contributions, describing how the change benefits the NANP and how the change shall affect the NANPA's duties, obligations or accountability.

Within seven days of a change, the NANPA shall provide its interpretation of the change, its impact upon service, the date the new change is proposed to become effective, what steps in current procedures need to change and when any new forms or procedures will be required. The NANPA shall provide this information to the FCC and the NANC. When the INC places any changes to its guidelines in initial closure, the NANPA shall submit an assessment regarding the impact of scope of work, time and costs to the INC, the NANC and the FCC within 30 days.

The NANPA shall post changes in procedures on its web site prior to the change taking effect

The NANC shall be consulted at the FCC's discretion regarding the suggested implementation date to determine the likely impact on service provider processes and systems (i.e., whether it would be unduly burdensome or would unfairly disadvantage any service provider or group of service providers per the NANPA's obligations and NANP administrative principles).

Specifically, the NANPA shall:

- Notify all interested parties when guidelines have changed.
- Interpret guideline changes and impact upon processes.
- Identify implementation date or effective date.
- Provide notification of new forms or tools that may be required.
- Identify a Single Point of Contact (SPOC) within the NANPA to answer questions.

- Accept, process, and verify the accuracy of applications for CO Codes in accordance with regulatory requirements and industry guidelines.
- Contact code applicant as necessary to gain clarification or additional information in order to process the application when first submitted.
- Review entire application, identifying all errors and omissions when first submitted.
- Provide information or location of tools and contacts to assist applicants in properly completing applications for connects, changes and disconnects.

#### 2.11 Audits

The NANPA and service providers shall be subject to audits to verify their compliance with guidelines and regulations relating to all applicable areas of number administration.

#### 2.11.1 For Cause Audits of Service Providers

In the performance of its numbering administration duties and in meeting its responsibilities, the NANPA may encounter situations that may alert it to a service provider's possible noncompliance with the industry guidelines. This noncompliance warrants the need for a "For Cause" audit.

In these situations, the NANPA shall document its observations and forward relevant information to the FCC, service provider, and appropriate state commission.

The NANPA shall maintain the confidentiality of all requested information throughout the auditing process.

#### 2.11.2 Other Audits of Service Providers

The NANPA shall be required to provide specific data to an auditor in order to facilitate the audit of a service provider.

# 2.12 Dispute Resolution

The NANPA may be involved with dispute resolution. These disputes could arise from the performance of NANPA activities, from industry forum activities, or from conflicting government or regulatory policy directives. The extent of involvement of the NANPA in the resolution of disputes shall depend on the nature and origin of the dispute. A Dispute Resolution process, established by the NANC, shall be followed for determination of the controversy.

The NANPA shall assign numbering resources based on regulatory directives and industry guidelines. A disagreement may arise when the NANPA is assigning or denying the assignment of a resource, and the NANPA shall be required, based on the relevant regulatory directives, assignment guidelines, and the NANC Dispute Resolution process, to address and, if possible, resolve the disagreement. In addition, disputes may arise between regulatory authorities of NANP member countries and the NANPA may be required to participate in the resolution of the issue between the countries involved.

The NANPA shall interpret and apply relevant guidelines, directives, and Orders, including those listed in the *Index to the Binder of Decisional Principals* (see Appendix C), to resolve a disagreement when assigning or denying the assignment of a numbering resource.

Disputes may also arise within industry numbering activities. When this occurs, the NANPA may be requested to participate in dispute resolution by providing guidance and/or historical data.

The NANPA shall abide by the NANC dispute resolution process. The NANPA shall provide any information it has relative to the dispute to the appropriate group responsible for resolving the dispute.

For all disputes, concerns, complaints, and issues raised by clients, oral or written, the NANPA shall prepare a document that contains:

- Description of the dispute, concern, complaint, or issue (recorded within one business day)
- Plan of action (recorded within one business day)
- The resolution and reasoning (recorded within one business day of resolution)
- Business days passing before referred to appropriate state or federal regulators
- Business days passing before resolution accepted by complainant

# 2.13 Data Security

The NANPA shall be responsible for maintaining the security, reliability, performance and flexibility of the NANP Administration systems. The systems shall protect the sensitive nature of any information provided by service providers, the Pooling Administrator (PA) or any other source of proprietary or confidential information.

The NANPA shall protect any service provider-specific data designated as confidential unless otherwise directed by that service provider or the FCC.

#### 2.13.1 Limited Access

All work areas shall have limited access and secured record retention practices to ensure that service provider-specific data is afforded the level of security required to maintain its designated security status.

NANP Administration Systems shall have, at a minimum, security measures that are in conformance with the FCC Computer Security Program (FCC INST 1479.3). Systems shall include appropriate security measures for confidential data and accessibility for all service providers to their own information through an appropriately secured mechanism. The NANPA shall provide state commissions limited password-protected access to the CO Code administration database.

#### 2.13.2 Physical Security

The NANPA shall provide suitable security for any and all computer systems that contain assignment information and proprietary applicant information. This includes any system that

is connected to any telecommunications network. The NANPA shall maintain and enforce physical security procedures that conform to the requirement to maintain confidential and proprietary information.

The NANPA shall also be responsible for the activities of any subcontractors to ensure the security of all systems and data, including requiring all subcontractors to execute a nondisclosure agreement.

The NANPA shall ensure that any data requested by a non-NANPA entity is protected as confidential by that entity through applicable law or another documented nondisclosure mechanism.

#### 2.13.3 Site Visits

The FCC, with or without notice to the NANPA, shall have the right to make visits to NANP Administration and data centers to review safety/security requirements. If the safety and physical security procedures do not comply with those specified, the NANPA shall correct such noncompliance within ten business days.

In the event of non-compliance the NANPA shall implement corrective measures and give notice of such implementation to the FCC, and the FCC may make one or more follow-up visits to the affected site, as necessary, to confirm that the deficiency has been rectified. The FCC's rights under this paragraph shall not in any way limit the FCC's ability to visit any site for reasons other than a safety/security visit.

Inspections shall include, but not be limited to, the facilities of subcontractors, telecommuting employees of the NANPA or subcontractors, NANPA or subcontractor maintenance organizations, or individuals on traveling status with access to NANPA's systems.

# 2.13.4 Data Accessibility

Systems shall have logon ID and password access. Formal access shall be initiated upon receipt of a completed logon ID request form having the proper signature approvals from the requesting organization. The user's security requirement sets the correct level of record access and system capabilities. For forms and reports requiring an applicant signature, a valid logon ID and password shall be considered tantamount to an applicant signature.

#### 2.13.5 Unauthorized Access

In the event that the NANPA becomes aware of an unauthorized access to its systems or user or service provider data, the NANPA shall immediately notify the FCC and the applicable user(s) by e-mail, investigate the unauthorized access, and provide the FCC and its designees with reasonable access to all resources and information in the NANPA's possession as may be necessary to investigate the unauthorized access. The FCC shall have the right to conduct and control any investigation relating to unauthorized access that it determines is appropriate.

#### 2.14 Implementation Plan

The NANPA shall provide an Implementation Plan to the FCC within 30 days of contract award and an update of the Plan 30 days prior to the takeover of NANP Administration. The objective of this Implementation Plan shall be to achieve a seamless continuance of NANPA services across Terms of Administration.

#### 2.15 NANPA Transition to Successor

The NANPA shall transfer, in the case of termination or at the expiration of the Term of Administration, to the FCC or designee all hardware, software, and rights to software contracts and other intellectual property as outlined in the Transition Plan.

This NANPA transition is additionally subject to the termination and continuity provisions in Section H of the Solicitation. All bidders should identify transition-related costs separately, including costs for transition from its predecessor and costs for transition to a successor. Any other equipment or contracts associated with NANPA day-to-day operation shall transfer. This shall include but is not limited to:

- The systems and all supporting documentation
- All software
- All hardware
- Computers and related equipment
- Other peripheral devices
- All NANPA records both current and stored

#### 2.15.1 Transfer Efficiency

The transfer of all property shall be performed in a manner that shall ensure an efficient and orderly transition of the NANP Administration System and associated equipment to a successor's environment in a fully operational state.

#### 2.15.2 Technical Support

The NANPA shall provide at least 15 working days, but up to 45 working days over a 6-month period, if required, of technical support to ensure a smooth transition of the system.

#### 2.15.3 Documentation

The contractor shall provide the FCC with copies of all documentation specified in the System Documentation Plan.

#### 2.15.4 Transition Plan

The NANPA shall, 180 calendar days prior to contract termination, provide a detailed plan for an efficient and orderly transition. This transition plan shall follow the format, as applicable, of Reference 28, *Software Transition Plan (STrP)*.

#### 2.16 Term of Administration

The NANPA shall serve for an initial period of up to five years.

At any time prior to the termination of the initial Term of Administration, the Term of Administration may be renewed up to five years in length with the approval of the NANPA and the FCC.

#### 2.17 Interfaces

The NANPA shall interact with the PA, the NPAC, the LERG, state, Federal and NANP member country regulatory authorities, as well as with service providers.

The NANPA shall also interact with the news media concerned with numbering matters. Information and data shared with the news media shall be factual in nature, publicly available and previously made known to the industry and regulators prior to media disclosure.

At this writing, Neustar is both the PA vendor and the NPAC vendor. Telcordia maintains the LERG. Service providers, federal and state regulators, and NANP member countries are responsible for establishing mutually-agreed upon communication interfaces with the NANPA that meet their individual equipment requirements.

#### 2.17.1 Interface With the Pooling Administrator

The interface between the PA and the NANPA shall be used to exchange information on the status of pooling and to solicit data that is relevant to the daily functions of each administrator. NANPA shall maintain a mechanized interface between the NANP Administration System (NAS) and the Pooling Administration System (PAS) to permit the flow of information pertaining to applications for central office code assignments.

#### 2.17.2 Interface With BIRRDS

The NANPA shall maintain access to the BIRRDS (Business Integrated Rating and Routing Database) and LERG to perform both its administrative functions and the required Enterprise Service.

The BIRRDS interface consists of a gui interface. The interface shall be used to enter data into the BIRRDS database for central office code assignments. (Telcordia maintains the BIRRDS database, which is used to produce the LERG.) The NANPA shall arrange directly with Telcordia for LERG access.

# 2.17.3 Interface With the Number Portability Administration

The interface shall be used to request information from the NPAC about NXXs that are about to be reclaimed by NANPA to ensure that there are no ported Telephone Numbers (TNs) contained within the NXX targeted for reclamation. If the NANPA finds that there are ported TNs within the targeted NXX, the NANPA shall refer to the appropriate guideline for alternative reclamation processing steps.

#### 2.17.4 Interface With the Service Providers

The Service Provider (SP) interface shall be used to receive NANP resource applications and to send assignments, in a relay between the NANPA and a service provider. Any or all of the following interfaces also may be necessary, depending on the particular service provider with which interaction is taking place: system-to-system (FTP), web site, e-mail, facsimile, and U.S. Mail. For example, these interfaces shall be used to receive requests and to send assignments. They are also used for Number Resource Utilization and Forecasting (NRUF) form submissions and to return a confirmation receipt to the service provider after an application and/or form has been accepted by the NANP Administration System for processing. NANPA is responsible for ensuring the availability of these interfaces.

#### 2.17.5 Interface With the FCC

This interface shall be used to obtain the information necessary to conform to the FCC rule found at 47 C.F.R. §1.1910 and commonly referred to as the "red light rule." This rule provides that anyone filing an application or seeking a benefit from the Commission or one of its components (including the Universal Service Administrative Corporation, the Telecommunications Relay Service, or the North American Numbering Plan Administrator) who is delinquent in debts owed to the Commission will be barred from receiving a license or other benefit until the delinquency has been resolved. Under this rule, when an application or request for benefit is filed, the FCC Registration Number (FRN) will be checked to determine if the entity or person is delinquent in debt owed to the Commission. If the NANPA finds the applicant appears on the FCC's Red Light List, they will withhold numbering resources from that entity.

#### 2.17.6 Interface With the State Regulatory Agencies

This interface shall support state regulatory access as appropriate to forms and applications filed by service providers. It may also be necessary to fulfill a data request by voice, facsimile or U.S. Mail. For example, the interface shall be used to provide a regulator forecast and utilization data for an NPA within its jurisdiction.

The NANPA may be called upon to testify in regulatory hearings. In these cases the NANPA shall ensure that its testimony is specific to the scope and requirements of this contract. Testimony in regulatory hearings shall be treated as an enterprise service (see Section 11).

The NANPA shall also be responsible for interfacing with regulatory authorities in person, when requested by such authority. The nature of these meetings may be educational or informational depending on the circumstances and issues identified.

#### 2.17.7 Interface With the Media

The NANPA shall also be required to communicate with the press.

The NANPA shall prepare press releases and speak to the public in matters relating to all aspects of administration and management of NANP resources.

#### 2.17.8 Interface With the ITU Technical Standards Bureau

The NANPA shall interface with the ITU-Technical Standards Bureau (TSB) when required to provide information regarding the NANP. This information shall consist of the latest web links, contact individuals and timely information on the NANP, and any changes to the NANP (*e.g.*, the introduction of new NPAs) as required from national numbering administrators per ITU Recommendations.

#### 2.17.9 Interface With the ITU Study Group 2

The NANPA shall interface with the U.S. State Department and participating service providers through their attendance at ITU Study Group 2 meetings and activities. The NANPA's role shall be to advise the participants as to whether international issues and conflicts shall have an impact on the management and availability of NANP resources.

#### 2.18 Mobile Identification Number Block Identifier Administrator

The NANPA shall be required in the United States to work with the neutral third party Mobile Block Identifier (MBI) administrator, for the Mobile Identification Number (MIN) administration for wireless LNP and thousands-block number pooling. MIN-based wireless providers register existing MBIs and obtain new ones through the MBI Administrator. NANPA shall interface with the MBI Administrator on, among other issues, MBI Resources and NPA splits.

#### 2.18.1 MBI Resources

MBI Administration needs to continually add MBI resources to its database. The MBI Administration Guidelines and Procedures, developed by Cellular Telephone Industries Association (CTIA) and the MBI Oversight Council, state that "MBI Administration shall monitor the assignment of central office codes on an ongoing and timely basis." The NANPA shall provide the MBI Administrator information on the resources that are available as assignable MBIs.

# 2.18.2 NPA Splits

In an NPA split situation, the wireless providers retain the MINs of the old NPA, even if their Mobile Directory Numbers (MDNs) change because of the split. The MDNs associated with the MINs may have a different NPA and may become available for assignment in the old NPA, but the MINs or MBIs remain the same so that customers do not have to bring in their handsets to be reprogrammed. If an NPA-NXX combination becomes available for assignment of MDNs in the old NPA, that corresponding MIN bloc should already show up in the MBI administrator's database as "assigned" and the corresponding MINs shall not be assigned again to a different carrier. In addition, the MBI Guidelines state that the MBI administrator shall not assign the corresponding MBIs for unassigned CO Codes in order to

accommodate non-LNP capable carriers. This is true for all NPAs. If, however, the MBI has already been assigned before the split and now the corresponding NPA-NXX becomes available for MDN assignment in the old NPA, it creates a need for communication with the NANPA so that the NANPA does not assign newly available or "freed-up" NPA-NXX combinations to non-LNP wireless carriers. This is because the corresponding MBI would already be assigned and would not be available.

#### **Section 3**

# **NANP Administration**

The NANPA is responsible for management, administration, and assignment of all designated numbering resources within the NANP.

The following list identifies NANP numbering resources that fall under the NANPA's direct responsibility and management:

- NPA Codes;
- CO (NXX) Codes;
- International Inbound NPA 456 NXX Codes;
- Personal Communications Service (PCS)/NPA-NXX Codes;
- Easily Recognizable Code (ERC) 900 NXX Codes;
- N11 Service Codes (reporting only);
- Hearing Impairment Codes 800 855-XXXX line numbers;
- Information Services Codes 555-XXXX line numbers;
- Carrier Identification Codes (CICs);
- Vertical Service Codes (VSCs);
- Automatic Number Identification Information Integers (ANI II) Digits; and
- Additional numbering resources, as may be defined.

The sections that follow describe each resource, and summarize the NANPA's responsibilities. The NANPA is also required to report the status of each resource.

# 3.1 Numbering Plan Areas (NPAs)

NPA refers to an area code that is the first three digits of a telephone number.

NPAs are classified as either geographic or non-geographic:

- Geographic NPAs are NPAs that correspond to discrete geographic areas within the NANP area.
- Non-geographic NPAs are NPAs that do not correspond to discrete geographic areas, but which are instead assigned for services with attributes, functions, or requirements that transcend specific geographic boundaries.

States within the United States have been delegated area code relief authority and may have unique directives and legal requirements associated with approval and implementation of any NPA relief activity.

The NANPA is responsible for assigning NPAs when the criteria for such an assignment have been met.

The NANPA shall ensure that an NPA assignment conforms to regulatory directives and NPA relief plans (from the FCC and state commissions) and industry guidelines (*e.g.*, from the INC).

# 3.2 Central Office (CO) Codes

The three digits after the NPA are referred to as the CO Code. The NANPA shall monitor the actual and forecasted assignment of CO Codes through the Months-to-Exhaust (MTE) form filed with each CO Code application.

In addition, forecast and utilization data are submitted to the NANPA by reporting service providers in the NRUF Report. This information is used to plan for the assignment of new NPA codes when existing NPA codes near exhaust (*i.e.*, additional telephone numbers are required to serve projected demand). The NANP Administration function also includes consultation with affected service providers and state commission when the depletion of central office codes necessitates relief.

#### 3.3 International Inbound NPA-456 NXX Codes

The 456 NPA and its associated NXXs enable the routing of inbound international calls for carrier specific services, particular to that service provider's network. The NANPA shall assign the NXXs within this NPA.

The procedures and guidelines are described in International Inbound NPA (INT/NPA/NXX) Assignment Guidelines (ATIS-0300049).

# 3.4 Personal Communications Service (PCS) NPA Codes

A PCS NPA-NXX is a non-geographic numbering resource that offers the user a set of capabilities that allows some combination of personal mobility, terminal mobility, and service profile management. A PCS NPA-NXX-XXXX number enables each PCS service user to participate in a user-defined set of subscribed services, and to initiate and/or receive calls on the basis of some combination of a personal number, terminal number, and a service profile across multiple networks at any terminal, fixed or mobile, irrespective of geographic location. Service is limited only by terminal and network capabilities and restrictions imposed by the personal communications service provider.

The NANPA shall manage, assign and administer NXX codes in the PCS NPA pursuant to regulatory directives and INC assignment guidelines.

The NANPA shall reclaim PCS NPA-NXX codes assigned to entities that fail to meet the terms specified in the assignment guidelines and /or by directives from the appropriate regulatory authorities.

# 3.5 Easily Recognizable Code (ERC) Code 900 NXX Codes

The 900 NPA is an ERC used for information services in which the caller pays for call setup and the specific services associated with the 900 call. The 900 NXX codes shall be assigned and used only for pay-per-call information services. The codes, referred to as "Pay-Per-Calls," may be accessed by the public over the PSTN using the dialing format 900-NXX-XXXX.

The NANPA shall reclaim 900 NXX codes assigned to entities that fail to meet the terms specified in the assignment guidelines and/or by directives from the appropriate regulatory authorities.

#### 3.6 N11 Service Codes

Codes in the N11 format (e.g., 911) are referred to as Service Codes. There are eight N11 service codes available in the NANP. The FCC determines the uses of N11 codes, which have been assigned as follows:

211	Community Information and Referral Services
311	Non-emergency Police and Other Governmental
	Services
511	Traffic and Transportation Information
711	Telecommunications Relay Service (TRS)
811	Access to One Call Services to Protect Pipeline
	and Utilities from Excavation Damage (US);
	Non-Urgent Health Teletriage Services (Canada)
911	Emergency

The 411 and 611 codes have not been assigned by the FCC. Carriers, however, use the 411 and 611 codes for access to their directory assistance and repair services respectively. Unassigned codes may also be assigned locally with the understanding that a local assignment shall be discontinued, on short notice, if the unassigned codes are requested for nationally assigned purposes. Some U.S. states have permitted local use of certain N11 codes, pending FCC designated assignments.

In Canada, the assignment of the N11 codes is generally consistent with the table above, except for code 511 which has been assigned for weather and traveler information services and 811 for non-urgent healthcare telephone triage service. Other NANP member countries may in the future designate specific uses for N11 codes within their jurisdictions.

# 3.7 Hearing Impairment Codes-800 855 XXXX Line Numbers

Line numbers from the 800 855-XXXX are used for assisting persons with hearing impairments. These numbers are assigned individually at the line level. The NANPA shall administer line numbers within the 800-855-XXXX resource with respect to services for persons with hearing impairments. Other NANP member countries may designate specific uses for 800-855-XXXX line numbers in the future.

#### 3.8 Information Services Codes-555 XXXX Line Numbers

The 555 NXX code is available (referred to as "555 numbers" in the form NPA-555-XXXX) in all geographic NPAs for access to information services. The guidelines permit a

subscriber to dial a 555-XXXX number in any NPA in North America using either a 7-digit or a 10-digit format.

Line numbers from the 555 NXX are assigned either on a national or non-national basis. National assignment means that the number is assigned exclusively to a single entity to be used in at least 30% of the available NPAs or states or provinces in the NANP serving area. Non-national assignment means that the number is assigned to an entity for use in a specific geographic area or areas (NPAs, states, or provinces) to be used in fewer than 30% of the available NPAs or states or provinces in the NANP serving area. "Non-national" numbers are available for assignment to multiple entities, allowing those entities to use the "non-national" number in different geographic areas.

The NANPA shall reclaim 555 NXX codes assigned to entities that fail to meet the terms specified in the assignment guidelines and /or by directives from the appropriate regulatory authorities.

# 3.9 Carrier Identification Codes (CICs)

A CIC is a 4-digit numeric code primarily used to uniquely identify an access customer who has purchased access such as Feature Group B (FGB) and/or Feature Group D (FGD) access services. These types of CICs are primarily used for routing from a local network to the access purchaser and for billing between the local network and the access purchaser. In addition, as the result of a 2002 directive to NANPA from the FCC, switchless resellers may also be assigned CICs without the requirement to first purchase direct FG D truck access. Also, pursuant to agreement reached by the Industry Numbering Committee (INC) in 2006, Billing and Collection Clearinghouses that provide third-party bill aggregation services on behalf of access purchasers may also be assigned CICs as identifiers only when the use of an ABEC (Alternate Billing Entity Code) is not technically feasible.

The NANPA shall manage and assign CICs. The NANPA shall reclaim CIC codes assigned to entities that fail to meet the terms specified in the assignment guidelines and/or by directives from the appropriate regulatory authorities. Reclamation occurs most often because the entity to which the CIC has been assigned does not obtain access within the sixmonth period specified in the assignment guidelines.

# 3.10 Vertical Service Codes (VSC)

VSC are standardized codes dialed by customers to access network features and services (*e.g.*, call forwarding) provided by network service providers. These codes appear in the \*XX or \*2XX format. The NANPA shall assign, manage, and approve new VSC assignment requests.

# 3.11 Automatic Number Identification (ANI) II Digits

ANI II digits are two digits that are sent with the originating telephone number identifying the type of originating station (*e.g.*, Plain Old Telephone Service (POTS), hotel/motel). The NANPA shall assign the digits and track the assignments.

ANI II digits are assigned by the NANPA at the request of the INC. The assignment of an ANI II digit does not imply its ubiquitous availability.

#### Section 4

# **Central Office Code Administration**

# 4.1 Requirements

The NANPA shall manage the CO Code resource in accordance with federal regulatory requirements and the latest version of the published *Central Office Code (NXX) Assignment Guidelines* (ATIS-0300051).

The NANPA shall perform the CO Code administration that encompasses the following major functional categories:

- User<sup>2</sup> Services
- Processing
- Client and Internal Communication / Notification Functions
- Status Reporting
- Tracking CO Code Utilization for NPA relief
- Managing jeopardy conditions

The NANPA, in order to perform CO Code Administration functions, shall maintain considerable knowledge of local/regional environments including geography, demographics, growth patterns, local dialing plans, and eligibility requirements. This knowledge shall be applied to each CO Code assignment. Local conditions for each NPA shall be posted to the NANPA web site.

The NANPA shall create a Change Management Plan for adapting the CO Code assignment practices in accordance with updates and modifications to the CO Code (NXX) Assignment Guidelines and regulatory directives. When there are changes, the NANPA shall institute a training program to educate all CO Code Administration staff in order to ensure consistent application. Training shall be completed within five business days before the date the change to the guidelines becomes effective.

# 4.2 Functional Specifications

CO Code administration activities include the key functional requirements detailed below.

#### 4.2.1 User Services

The NANPA shall produce and make available information regarding CO Code Administration processes, guidelines, procedures, interfaces, and services. Upon request, the NANPA shall provide information on how to obtain current documents related to CO Code Administration. The NANPA may refer users to web sites where information can be located and downloaded. These documents currently include:

User represents code applicants, code holders, regulatory agencies, and the general public.

- CO Code (NXX) Assignment Guidelines
- NPA Code Relief Planning Guidelines
- Industry Notification of NPA Relief Activity Guidelines
- NPA Allocation Plan and Assignment Guidelines
- Recommended Notification Procedures to Industry for Changes in Access Network Architectures

The NANPA shall provide assistance to all entities who use numbering resources and suggest alternatives, when possible, that may assist users with numbering resource optimization and utilization issues.

The NANPA shall maintain working knowledge of applicable state regulations and local dialing plans.

The NANPA shall assist Code Applicants with understanding and completing all forms and appendices associated with INC Guidelines.

The NANPA shall educate users. Such education may include, but is not limited to, providing job aides and providing necessary forms and instructions on the NANPA web site. The NANPA shall notify its users and interested parties when industry guidelines or applicable regulatory directives have changed. The NANPA shall provide electronic notification of administrative process and procedural changes within five business days of the change being identified by the NANPA. Implementation of these changes shall include a transition period before the new process or procedure becomes effective.

The NANPA shall respond to inquiries regarding available and assigned CO Codes. Such response may consist of referring the user to a specific page on the NANPA web site.

#### 4.2.2 Processing

The NANPA shall receive and verify applications for CO Codes in accordance with FCC directives and CO Code (NXX) Assignment Guidelines.

If a state commission has not yet chosen a relief method and established a relief date, the NANPA, as CO Code administrator, and the industry shall devise the jeopardy conservation or rationing measures, consistent with the industry guidelines.

As CO Code Administrator, the NANPA shall be aware of and adhere to any limits on code assignments as ordered by state commissions or agreed to by industry, as well as any other provisions of rationing plans such as prioritization of applications.

The NANPA shall apply CO Code optimization practices in accordance with FCC directives and the CO Code (NXX) Assignment Guidelines, as appropriate.

The NANPA shall also:

- Maintain a CO code conflict database and publish on the NANPA's web page CO codes by NPA that are "unavailable for assignment" due to dialing, routing and/or rating conflicts.
- Include in this list CO codes that are unavailable due to permissible services identified by the state tariff, CO codes that are used for testing, and CO codes that are used for unique call routing/rating arrangements.

• Consult, providing details of local/regional environments including, for example, geography, demographics, growth patterns, local dialing plans, and eligibility requirements.

#### 4.2.3 Communication/Notification Functions

The NANPA shall post daily on its web site the NXXs assigned and the NXXs available in each NPA. This information shall be updated daily as changes occur. Other means of distributing reports shall be available as necessary. The NANPA shall follow the CO Code (NXX) Assignment Guidelines for notification of CO Code assignments. The NANPA shall enter data directly into the BIRRDS database.

The NANPA shall have the capability to input rating and routing data into the BIRRDS database as an enterprise service to a code holder.

The NANPA shall issue notification of all CO Code jeopardy situations and other pertinent CO Code administration activities to the appropriate regulatory agencies and the affected industry members.

# 4.2.4 Status Reporting

For CO Code Administration, the NANPA shall monitor and report the status of NXXs in each NPA. These reports shall be generated and posted to the NANPA web site each business day.

#### 4.2.5 Tracking CO Code Utilization for NPA Relief

The NANPA shall fulfill the process responsibilities in accordance with the NPA relief guidelines and regulatory directives, including the following:

- Determine when to initiate NPA Relief by continually monitoring CO Code growth and projecting exhaust.
- Upon the identification of a potential exhaust situation, notify appropriate regulatory authorities and affected parties within the NPA.
- If necessary, immediately organize a relief-planning meeting to obtain local industry consensus and subsequent regulatory direction for a relief implementation plan.

#### 4.2.6 Management of Jeopardy Conditions

The NANPA shall:

- Declare a jeopardy NPA condition within any NPA that meets the conditions established in the appropriate industry guidelines and regulatory orders.
- Monitor CO Code growth and projected exhaust.
- Notify appropriate regulatory authorities and affected parties within the NPA.
- Notify the industry that jeopardy code rationing is available if so desired, or may be specified in a pending state commission order if the industry does not come to consensus on a rationing plan.

• Implement NPA-specific conservation measures as a part of CO Code application processing, if necessary, subject to local industry consensus or regulatory direction.

# 4.3 Management of the Code Inventory

The NANPA shall track and monitor MTE, forecast, and utilization reports so that it shall be able to forecast demand and anticipate the need for relief to avoid premature exhaust of each NPA and the NANP.

#### 4.4 Resource Reclamation

In accordance with paragraph 237 of the FCC Report and Order and Further Notice of Proposed Rule Making, March 31, 2000 (FCC NRO Order), the NANPA shall reclaim numbering resources assigned to entities that fail to meet the terms specified in the assignment guidelines. The NANPA shall receive and process Part 4 confirmations from code holders during the six-month period following the published LERG effective date of the code. Receipt of a Part 4 from a code holder certifies that the code has been placed in service. The NANPA shall acknowledge its Part 4 receipt by issuing the code holder a Part 5 Administrator's Part 4 Receipt/Confirmation verifying the code holder's use. The NANPA shall maintain a tracking system for receipt of Part 4s and return notification of Part 5 Forms. No further action is required of the code holder once a Part 4 has been submitted. Not later than one month prior to the end of the six-month period, the NANPA shall send a reminder notice to code holders that no Part 4 Form has been posted for the code now assigned to them. NANPA will send a second notice to the service provider if no Part 4 is received within six (6) months of the original code effective date. This notice will inform the service provider that it must submit the Part 4 to the appropriate regulatory authority. If requested, the NANPA shall submit lists of service providers who are delinquent in the return of the Part 4 forms to state regulators. If a code holder fails to submit a Part 4 within the time-frame specified by the FCC, the NANPA shall initiate the reclamation procedures, keeping accurate and complete records for each action taken. The NANPA shall obtain either state or FCC regulatory approval prior to initiating the reclamation process.

The NANPA shall maintain a current point of contact list for CO Code reclamation. Regulators and service providers are to be included on the list. In addition, a contact list for all other NANP members shall be maintained, if necessary.

The NANPA shall provide a confirmation in response to every CO Code application received.

#### **Section 5**

# **NPA Relief Planning**

The NANPA shall perform the area code (NPA) relief functions specified in the INC NPA Code Relief Planning Guidelines. The NANPA shall be prepared to work with state regulatory authorities that may choose to assume any of these responsibilities, pursuant to FCC orders.

The NANPA, in order to effectively perform its NPA relief functions, shall maintain considerable knowledge of local/regional environments including geography, demographics, communities of interest, growth patterns, local dialing plans, and operating/certified service providers. The NANPA shall determine NPAs in need of relief and appropriately manage the relief efforts through the implementation of a new area code.

The NANPA shall notify all affected CO Code holders with regard to NPAs in need of relief, and any associated meeting information. In addition to notification, the NANPA shall forward the Initial Planning Documents (IPD) a minimum of four weeks before any scheduled NPA relief-planning meeting and the NANPA shall facilitate the meeting. The NANPA shall post to its web site all NPA relief meeting announcements and preliminary planning information.

Accordingly, the NANPA shall continue to update the local/regional information and contact information to meet the level of NPA relief expected in any given year during its Term of Administration.

# 5.1 Key Responsibilities

Key NANPA NPA relief responsibilities consist of the items noted below.

#### **5.1.1 Relief Timing**

The NANPA shall determine the need for and identify the timing of NPA Relief in accordance with CO Code (NXX) Assignment Guidelines and NPA Code Relief Planning Guidelines. One of the tools for performing this task utilizes NRUF Report data.

## **5.1.2 Relief Planning Communication**

The NANPA shall promptly communicate with all affected industry members and appropriate state regulatory authorities to advise them of the need for relief planning to occur.

## 5.1.3 Initial Planning Document (IPD) Preparation and Distribution

The NANPA shall prepare and distribute to industry members and state regulatory authorities an IPD for each NPA projected to exhaust over the forecast period, as identified in the NRUF Report. The IPD shall describe and assess possible relief options and include detailed historical information regarding prior years' forecasts, versus the actual assignment of codes.

## **5.1.4 Relief Planning Meetings**

The NANPA shall schedule initial NPA relief planning meeting(s) per the NPA Code Relief Planning & Notification Guidelines. This meeting shall be 36 months in advance of the projected NPA exhaust date to permit the timely planning and implementation of NPA relief.

## **5.1.5** Relief Planning Report

The NANPA shall provide a report to the NANC, once per quarter, on its success or failure in meeting this Performance Measurement.

## 5.1.6 Relief Planning Consensus Building

The NANPA shall notify interested industry and state regulatory authorities of NPA Relief Planning meeting(s) and conduct the meeting(s) with the objective of gaining consensus on a relief plan.

#### 5.1.7 Neutral Facilitator Role

The NANPA shall act as neutral facilitator for all relief planning meeting(s) (i.e., issuing meeting announcements, coordinating meeting arrangements, setting an agenda, leading the meeting, issuing meeting minutes, and other duties necessary to conduct the meeting).

## 5.1.8 Proactive Role in Relief Planning

The NANPA shall ensure state regulatory authorities have appropriate information necessary to endorse industry-consensus relief plans or develop their own plan if they desire. The NANPA shall proactively work with the state regulatory authorities to achieve endorsement of a relief plan by the date established to allow the industry appropriate time for implementation.

## **5.1.9 Status Reporting on Relief Plans**

The NANPA shall track and report on the status of pending relief plans to the FCC and the NANC each month.

#### **5.1.10** Possible Testimony

The NANPA may be requested to provide testimony to the state regulatory authorities regarding the relief plan, as necessary. This service shall be treated as an enterprise service (see Section 11).

## **5.1.11** New NPA Code Assignment

The NANPA shall, prior to the NPA relief date, assign a new NPA code(s) in accordance with the approved relief plan.

## 5.1.12 Implementation Scheduling

The NANPA shall schedule the first implementation meeting once a form of relief has been selected and ordered by a state regulator.

## 5.1.13 Industry Scheduling

The NANPA shall provide industry notification of NPA code relief implementation activities (*e.g.*, adequate advance notice, public announcements, test number and testing period, new boundary maps, new dialing procedures, Line Information Database (LIDB), the BIRRDS database, LERG, LIDB Access Routing Guide (LARG), relief date, permissive dialing period, mandatory dialing date, ANI records). The NANPA shall also provide notifications of any subsequent changes made by state commissions to relief dates, permissive dialing periods, or mandatory dialing dates.

#### 5.1.14 Press Release

The NANPA shall, with the input and approval of the state regulatory authorities and industry, prepare and issue a press release to inform the public of the approved Relief Plan and respond to requests from the media and public for information.

## **5.1.15 Implementation Assistance**

The NANPA shall assist NPA Relief implementation teams and the Number Administration Service Center (NASC), as necessary, with modifications to the toll-free database. If necessary, the NANPA shall declare a code in jeopardy based upon the INC definition of a jeopardy situation and implement an NXX code-rationing plan agreed to by the industry. If there is no industry consensus on an NXX code-rationing plan, the NANPA shall implement a state approved rationing plan after the state commission orders NPA relief. After a state regulatory authority orders a specific form of area code relief and has established an implementation date, the NANPA shall adopt and implement that plan as ordered by the state regulatory authority.

## 5.1.16 Compliance

The NANPA shall:

- Comply with CO Code (NXX) Assignment Guidelines, NPA Allocation Plan and Assignment Guidelines, and NPA Code Relief Planning Guidelines.
- Implement a planned approach using effective forecasting and management tools and skills in order to ensure the availability of numbering resources.
- Facilitate the timely planning and implementation of NPA relief.
- Proactively work with state regulatory authorities to achieve selection of a relief plan by the requested date to allow the industry appropriate time for implementation.

If a relief plan has not been approved by 90 days prior to industry requested approval date, then the NANPA shall notify the state commission in writing of the date the relief plan approval was requested – a copy of which shall be sent to the NANC Chair.

If the state regulatory authorities have not ordered an NPA relief plan on or before the industry requested approval date, the NANPA shall notify the FCC and the NANC in writing and provide the date by which an order is required to avoid jeopardizing the timely implementation of NPA relief.

## 5.2 User Notification

The NANPA shall maintain an electronic document distribution system, which NPA relief planners shall use to notify affected users of the need for an NPA relief meeting and to keep all users informed of final relief plans and implementation processes.

The document notification system shall also be used to distribute additional details and data deemed necessary to keep clients informed of the status of any relief activity that has experienced a delay in implementation.

#### Section 6

# **Utilization and Forecasting**

The NRUF Report is filed twice annually by service providers in accordance with FCC orders and regulations. Each service provider shall complete the NRUF Report and submit it to the NANPA on or before February 1st and August 1st of each year.

The NANPA shall compile, examine, and analyze the data gathered from these reports and submit its analysis to the NANC, the FCC and state regulatory commissions that have requested it, semi-annually on the last business day of April and October of each year, unless otherwise directed by the FCC.

# 6.1 Responsibilities

The following is a list of the functional areas that fall within the NANPA's data collection, processing and NRUF reporting responsibilities:

## 6.1.1 Point of Contact

The NANPA shall be the point of contact for collecting forecast and utilization data. Forms shall be submitted electronically unless utilizing the Enterprise Service provided by NANPA as described in Section 11.2. The NANPA shall assist carriers in completing the NRUF forms by clarifying the service provider requirements to report and correctly understand the NRUF process.

#### 6.1.2 Contact List Maintenance

The NANPA shall maintain a list of the individuals within each reporting entity identified on the last NRUF report submitted by that entity as the contact person. The NANPA shall periodically remind reporting entities in writing of the need to keep the list of contacts current and accurate.

## 6.1.3 Data Requests

The NANPA shall request the NRUF data from all Service Providers within the U.S. Such data shall be requested for submission on February 1<sup>st</sup> and August 1<sup>st</sup> of each year. All NRUF data shall be aggregated from within the same timeframe. Data from U.S. service providers shall be processed separately, and then aggregated with all other reported data to obtain a complete picture of the status of the NANP.

Canada and the Caribbean will provide exhaust projections to the NANPA.

## **6.1.4 Data Requests in Pooled Areas**

In pooled rate centers within an NPA, the NANPA shall receive forecast data in thousands-block increments. The PA shall provide aggregated NRUF forecast data to the NANPA.

## 6.1.5 Data Analysis

The NANPA shall compile, examine and analyze all the data obtained from the semi-annual NRUF Report. The results of this analysis shall be made available by the NANPA on the last business day of April and October of each year.

The NANPA shall compare actual NPA exhaust and current exhaust forecasts with the past five exhaust projections. The NANPA shall summarize the accuracy of its forecast outlining (1) contributing factors, (2) changes required, (3) the outcome if no change is made, (4) the parties who shall participate in the change, and (5) a description of the activity each party shall take to realize the desired outcome. The NANPA shall provide an analysis of the accuracy of its forecasting tool as an NPA reaches exhaust prior to the beginning of each forecast cycle.

## 6.1.6 Data Reporting

The NANPA shall produce a semi-annual report that summarizes the projections of exhaust of each NPA and the NANP as a whole. The report shall at a minimum, be similar in format and content to the *NANP and NPA Exhaust Analysis* report, currently provided to the NANC. The NANPA shall highlight significant anomalies, for example, those NPAs whose projected exhaust date changes by more than six months from one report to another, and provide a brief explanation for the change.

## 6.1.7 User Support

The NANPA shall be available to its users to answer questions pertaining to any aspect of the NRUF Report process (*e.g.*, forms, instructions, analysis, data assumptions, etc.).

## 6.1.8 Data Aggregation

The NANPA shall also compile, examine, and analyze the forecast and utilization data submitted by reporting service providers between reporting periods. If it appears that the life of an NPA or the NANP shall be significantly affected by an updated NRUF Report submitted by a service provider(s), the NANPA shall report those results within 30 days of receiving the data submissions from the service provider(s).

In the event that NANP exhaust is affected by an updated NRUF submission, the NANPA shall send the results to the appropriate regulatory authority in NANP member countries and the NANC. In cases that only involve NPA exhaust, the NANPA shall forward the results to the appropriate regulatory commission.

#### 6.1.9 Request to Review Data

At the request of a U.S. state regulatory authority and upon receipt by the NANPA of a written statement that the state regulatory authority has confidentiality procedures in place to protect the data, the NANPA shall, within ten business days, provide a single report containing disaggregated data to any requesting state that is reported by service providers in that state, so long as the request is made 30 days after the deadline for NRUF reporting and

before the subsequent NRUF reporting deadline. Regulators shall also have access to the NRUF data for the NPAs in their respective states via NAS.

The NANPA shall provide reports to state regulatory authorities per their initial request and delivery schedule. State regulatory authorities shall provide the NANPA with requested delivery schedule changes and report content changes at least 30 days prior to the effective date of the change. Requests of this nature shall be provided without an additional charge to the state commission

## 6.1.10 Penalties for Non-Submission

If an NRUF Report has not been submitted by a service provider, the NANPA shall withhold future numbering requests from that service provider within the NPA for which the NRUF data has not been supplied. Once the NRUF data has been submitted, the NANPA shall process the request.

## **6.1.11 Report Anomalies**

If the NANPA identifies any significant inconsistencies or anomalies in a service provider's data (e.g., missing utilization on assigned central office codes or one thousand blocks), the NANPA shall inform the submitting service provider of its findings, provide the specific data relevant to document the significant inconsistency or anomaly in the service provider report, and request a review and confirmation (written or oral) from the service provider. The NANPA shall allow the service provider five business days to provide that confirmation, or to resubmit the data. If, after the discussions with the provider, the NANPA still believes that the provider's data contains inconsistencies or anomalies, then the NANPA shall report its findings to the appropriate regulatory bodies (*e.g.*, state commissions, the FCC).<sup>3</sup> The NANPA shall assign no additional numbering resources to such service providers until the appropriate state commission instructs it to do so. Where the state commission has chosen not to exercise this delegated authority, the NANPA shall seek instruction from the FCC.

# 6.2 Development of Tests for Anomalies and Inconsistencies

The NANPA shall examine the NRUF report submitted by each service provider for inconsistencies or anomalies. The NANPA shall design the tests and algorithms that it shall use to test the utilization and forecast data submitted by service providers prior to actually performing any tests. The NANPA shall provide a detailed description of the actual methodology employed to identify inconsistencies and anomalies. The description shall include a list of all assumptions and rationales incorporated into the methodology tests, as well as any mathematical formulas that are used.

The NANPA shall also work with the NANC to form criteria for determining what types of submissions shall be deemed inconsistent or anomalous. It is expected that the NANPA shall

17226

<sup>&</sup>lt;sup>3</sup> U.S. telecommunications providers only.

continually refine this process and remain mindful of the changing telecommunications landscape to ensure that its methods and assumptions are current and valid.

## 6.3 NANPA Analysis of Data

The NANPA shall accumulate and analyze forecast and utilization data from each service provider and the PA according to the schedule detailed in the First FCC NRO Order. The NANPA shall use this information along with historical and other data possessed by the NANPA to create a forecast that is as accurate as possible.

## 6.3.1 Methodology for Projecting NPA Exhaust

The NANPA shall project the potential exhaust of NPA codes. Although the NRUF data shall be the primary source of information for any analysis, the NANPA shall incorporate other relevant data elements into its analysis in determining the projected exhaust time frame of each geographic NPA.

Some of the additional data elements are noted below.

## **6.3.1.1** NRUF Survey Responses

Once the tests for inconsistencies and anomalies have been performed and the responses deemed acceptable by the NANPA, these responses shall be the primary input to any analysis of NANP and NPA exhaust.

## 6.3.1.2 Historical CO Code Assignment Data

The historical CO Code data includes NXX code assignments over at least the two years immediately preceding the date of the NRUF for all industry segments, *e.g.*, Incumbent Local Exchange Carrier (ILEC), Competitive Local Exchange Carrier (CLEC), two-way Commercial Mobile Radio Service (CMRS) Carrier, and Paging Carrier.

## 6.3.1.3 CO Code Rationing

After jeopardy has been declared, the rationed amount shall have a significant and direct effect on the life of the NPA, regardless of forecasted demand. In such cases, all other elements may be rendered irrelevant.

## 6.3.1.4 CO Code Assignments as of the Data Collection Date

A single recent event can affect the life span of an NPA, and thus CO code assignments as of the data collection date should be factored into the exhaust projections.

## 6.3.1.5 Total Number of Codes Available for Assignment

If relief has been applied since the last reporting period, the environment will have changed and the analysis must reflect the change.

#### 6.3.1.6 Rate Centers Per NPA

The effects of any rate center consolidation or split within an NPA may have a significant impact on CO Code demand.

## 6.3.1.7 Expanded Local Calling Areas

The inclusion of additional carriers in expanded local calling areas may also have an impact on CO Code demand.

## **6.3.1.8 Pooling**

The impact of thousands-block number pooling on CO Code demand, where it has been implemented, must also be taken into account.

## **6.3.2** Minimum Analysis Requirements

Prior to performing the analysis, the NANPA shall provide to the NANC a detailed description of the actual methodology employed. The description shall include a list of all assumptions and rationales incorporated into the methodology, as well as any mathematical formulas that are used.

The NANC shall have the opportunity to provide advice and consent to the analysis methods and assumptions the NANPA uses to perform its analysis of the NRUF results. Continuous methodology refinement is expected and encouraged. At a minimum, the analysis shall begin with a determination of the quantity of available NXXs within each NPA. Using the aggregated service provider forecasts and the tests developed by the NANPA to identify inconsistencies and anomalies, the NANPA shall determine the quarterly NXX demand for each NPA. The actual adjustments applied shall be consistent with, and fully explained in, the NANPA's description of assumptions and rationales.

#### 6.3.3 Anomalies and Trends

compact disk and paper.

The NANPA shall identify anomalies and trends in numbering usage for all NANP resources. The NANPA shall assist users in assessing the results shown and the action required to achieve numbering optimization goals. On an annual basis, the NANPA shall provide a report to the FCC reporting any anomalies and trends affecting the NANP.

# 6.4 Number Resource Utilization Form (NRUF) Submissions

The FCC requires U.S. service providers to submit NRUF data electronically unless utilizing the Enterprise Service provided by NANPA as described in Section 11.2. The NANPA shall support three five alternative methods for NRUF submission data collection: electronic file transfer (EFT), spreadsheet attachment to e-mail, and online entry

#### Section 7

# **Automated System Support**

This section describes key requirements of the existing NANP Administration System (NAS) and its capabilities. The system shall provide NANPA employees and clients' access to all necessary information required for NANP numbering resource management.

The NANPA shall maintain the NAS to ensure that the system is capable of supporting the requirements and functionality acknowledged within this document. In addition, the NAS shall be upgraded to ensure sufficient capacity to support current and future resources and users

This system shall include security measures for maintaining confidential data and provide accessibility for all users to their own information through an appropriately secured mechanism. In addition, a user class shall be maintained that allows specific users (*e.g.*, state regulatory authorities) to access selected, appropriate geographic data submitted by other users.

# 7.1 System Characteristics

The NAS shall utilize standard electronic commerce type functionality that allows efficient user interaction and data file transfer.

Data file transfer shall be simple and easy to understand.

## 7.1.1 System Availability

The NAS shall be available within the timeframes outlined within the FCC approved transition plan. The NAS shall be seamlessly available for input, processing, and downloads during users' normal business hours.

Scheduled maintenance shall occur outside of normal business hours and users shall be notified no less than 30 days in advance of any scheduled event

## 7.1.2 System Query Capability

For the purpose of this document, a query is defined as the ability to request and retrieve data stored in the system.

The system shall:

- Support users' needs to retrieve their data through a query capability.
- Support a user authorization level that identifies the range and scope of the data access of each user, including identification notice of approved access to their data by other users.
- Be capable of querying and retrieving one or multiple records using any stored data fields.

## 7.1.3 System Scalability

The NAS shall continue to be expandable and flexible so that it can easily expand its capacity and number of users.

Examples include:

- Addition of new NPAs
- Additional users
- The addition of new resource, and data elements
- Expansion of the NANP

## 7.2 System Capabilities

The NAS is designed for high reliability, possess data integrity features, and allow for economical and efficient system expansion.

The NAS design shall provide for the following capabilities:

- Capture all relevant applicant and user information.
- Facilitate the application and data filing process and the capture of required data in the database.
- Provide for generation of user information notices.
- Possess the ability to track status of all NANP resources.
- Support ad hoc query capabilities as well as production of predefined reports.
- Assist with NANP Administration document management.
- Possess the ability to track the status of a user's NANP resource application or data filing and the generation of reports regarding the tracking status of each application or data filing.
- Maintain data integrity.

If the system becomes unavailable for normal operations due to any reason, users shall be notified of the system unavailability within five minutes of any outage.

When possible, such notification shall be made via electronic capabilities. When this is not possible the NANPA shall notify all users via identified contact information by prearranged method (*e.g.* fax, telephone).

When the system is restored to normal operations, users shall be notified of the system's availability via electronic broadcast message within five minutes of system restoration.

# 7.3 System Location

The physical location of NAS facility is at the discretion of the NANPA. The only limitation is that the facility shall be within the continental United States. Identification of the proposed system location must be included in the Bidder's proposal.

## 7.3.1 Facility Characteristics

Space allocated for the NAS shall have the following characteristics:

- Be a distinguishable area with secure access points.
- Be contiguous space where personnel are physically located within the same area.
- Provide sufficient backup power to maintain operation through electrical outages for at least eight hours.

## 7.4 System Data

NANP numbering resource data and information shall be stored in the NAS in accordance with the categories and formats that correspond to those currently used and/or as may be defined in the future by regulatory directives and industry guidelines.

## 7.4.1 Data Integrity

The NANPA shall ensure that all data stored is accurate and take commercially reasonable steps to confirm that data processed is accurate.

## 7.4.2 Confidential Treatment

All individual user-specific data submitted to the NANPA, in any form, shall be treated as confidential.

Any data that contains proprietary user information shall not be accessible by the public on the NANPA web site, or published by the NANPA. The NANPA shall only publish and distribute aggregated data.

#### 7.4.3 Automated Submittal

The NANPA shall use the data interface protocols previously adopted and in use between service providers and the current NANPA vendor.

Except as noted, the NAS shall offer a web interface and/or allow for automated data input via EFT for applications and data forecast reports, as well as support an e-mail attachment transfer capability.

The EFT capability shall permit users to forward data in a predetermined format, which the NANPA shall then use to initiate processing within the NAS.

## 7.4.4 Automated Data Output Capabilities

The NANPA shall also accommodate automated data output via EFT when transmitting responses and other industry forms/data or reports to users per the appropriate industry guidelines.

## 7.4.5 Mechanized Interface with the Pooling Administrator

The NANPA will maintain a functional, mechanized interface between NAS and Pooling Administration System (PAS) that allows for the passing of information between the two administration systems and where appropriate, from SPs to the NANPA via the PAS and vice versa. This information includes the Part 1, Months-to-Exhaust Forms, Part 3, Part 4 and Part 4A.

## 7.4.6 Alternative Data Capabilities

The NANPA shall also support fax and e-mail submissions of user documentation (e.g., applications, forms, forecast reports).

## 7.5 System Maintenance

The details of a proposed system maintenance schedule shall be provided in the NANPA's System Maintenance Plan.

## 7.6 System Security

The NANPA shall maintain and enforce system safety and physical security procedures in accordance with the *FCC Computer Security Program* (Reference 25). The NANPA shall maintain confidential and proprietary information and institute any physical and safety procedures required.

Following contract award, the NANPA shall prepare a NANPA Security Plan following, as appropriate, the National Institute of Standards and Technology (NIST) *Guide for Developing Security Plans for Information Technology Systems* (Reference 30).

## 7.7 System User Profile Application

The NANPA shall develop and maintain a User Profile application process for the NAS to ensure that there is a mechanism to distinguish one system user from another. The NANPA shall maintain the capability to reach all service providers by maintaining automated and upto-date lists of addresses corresponding to all contacts. The NANPA shall update the list of contacts quarterly. The contact list shall be automated, facilitating mailing via U.S. Mail or electronically via e-mail.

The User Profile application shall contain at a minimum the contact information for each client, and other relevant identifying factors such as service provider operating company number (OCN) and FCC Registration Number (FRN). The NANPA is not responsible for assigning the OCN.

## 7.7.1 User Logon System

The system shall be able to support access to the NAS data with a unique logon ID and password upon receipt and approval by the NANPA of a request form.

## 7.7.2 Logon System Access

Access is initiated upon receipt by the NANPA of a completed logon ID request form having the proper signature approvals from the requesting organization.

## 7.7.3 Logon System Approval

After access approval, the NANPA shall assign the unique logon ID and appropriate security level corresponding to the type of user requesting access.

## 7.7.4 Logon System Security Level

The user's security clearance sets the correct level of record access and system capabilities.

## 7.7.5 Logon System Password

After the logon is initialized and entered into the system by the NANPA, the users shall be informed of the logon activation, and a completed logon ID request form shall be sent back to the requestor for its records.

## 7.7.6 Logon System Problems

Users experiencing problems in obtaining a logon ID shall contact the NANPA for resolution.

The NANPA shall resolve all logon problems within one business day.

## 7.7.7 User Access Permission Classes

The NAS is responsible for assigning new users the appropriate security permission class. The NANPA shall control access to all records.

## 7.7.8 Password Changes

All user passwords shall be changed every 180 days. If an individual ends employment with the user, the NANPA shall be immediately notified and a new password assigned.

## 7.7.9 Unauthorized Client User System Access

In the event the NANPA becomes aware of an unauthorized access to the NAS or user data, the NANPA shall immediately:

- Notify the FCC, and the applicable user(s) electronically.
- Report to the NANC that a breach has occurred and that the affected party has been notified.
- Subject to reasonable access, security, and confidentiality requirements, provide the FCC, affected users, and their respective designees with reasonable access to all resources and information in the NANPA's possession as may be necessary to investigate the unauthorized access.

The FCC, or its designee, shall have the right to conduct and control any investigation relating to the unauthorized access as it determines is appropriate.

## 7.8 System Inspection

Subject to the NANPA's reasonable access, security, and confidentiality requirements, a NANP member country or a designee, upon notice to the NANPA, shall have the right to make visits to the NAS facilities to review safety/security applications.

However, the NANPA is not required to support more than four visits in any 12-month period (excluding any follow-up visits referred to in the following sentence).

If any of the safety and physical security procedures as stated in the selected vendor's proposal are not implemented and maintained throughout its Term of Administration, the vendor shall be deemed noncompliant. Failure to correct such noncompliance within ten days shall subject the vendor to termination.

The NANPA shall:

- Implement corrective measures.
- Give notice of such implementation in preparation for one or more follow-up visits to the affected facility, as necessary, to confirm that the deficiency has been rectified.

## 7.9 System Report Administration

The NAS shall be capable of generating and distributing reports upon request. All reports, except individual user-specific data, shall be available and accessible electronically on the NANPA web site. All individual user-specific data submitted to the NANPA, in any form, shall be treated as confidential. Any data that contains proprietary user information shall not be accessible by the public on the NANPA web site, or published by the NANPA. The NANPA shall only publish and distribute aggregated data.

## 7.9.1 Report Distribution

Reports generated by the NAS shall be capable of being distributed and updated automatically. The report distribution system shall support an exploder list for automatic signup for updated report notification.

The NANPA shall distribute via the NANPA web site all summaries and comprehensive reports made known to the NANPA or produced by the NANPA or its affiliate contractor(s) performing NANPA duties in part or whole.

Reports shall be distributed by paper (including via U.S. Mail) and facsimile when requested. The Bidder shall describe its report distribution mechanism in its response.

# 7.10 Help Desk

The NANPA shall maintain a help desk that is accessible during the NANPA's regularly scheduled business hours.

The Help Desk shall be available to assist users with the input and the interpretation of system-generated reports.

The NANPA shall:

- Report problems with the web site, facsimile, voice mail or e-mail; for each problem the Help Desk will open a trouble ticket.
- Receive and transmit trouble tickets concerning communications problems with other vendors.
- Require that each trouble ticket be time stamped with minute accuracy and stored for recall for up to two years.
- Require that once a trouble ticket is closed, the originator of the trouble ticket shall be notified of disposition of the problem.

- Summarize the quantity and type of trouble tickets opened and closed during the year in the annual report.
- Require the help desk to assist customers to fill out applications or reports or to gain access to other authorized FCC or industry information.
- Require that if out-of-service conditions exists, the time stamped on the trouble ticket shall be used as the time for the start of the out-of-service period; when the out-ofservice condition has been cleared and the originator of the trouble ticket notified, the time stamped on the last update of the trouble ticket shall be used as the end of the outof-service period.

#### **7.10.1** Contact

The telephone number for the Help Desk shall be posted on the NANPA web site along with other relevant contact information to help users.

The NANPA shall provide mechanisms; *e.g.*, web, voicemail, e-mail, and facsimile, to be accessible on a 24-hour basis.

With e-mail, the NANPA shall have the capability of transmitting and receiving e-mail messages with and without attached files. The NANPA shall provide "firewall" protective screening of all incoming e-mail messages and attachments based on a security profile established by the NANPA and approved by the FCC. The NANPA shall additionally provide virus protection software on all devices that receive e-mail. The NANPA shall maintain the most recently updated version of virus software as defined by the software provider.

With facsimile, the NANPA shall provide the capability of transmitting and receiving ITU G.3 and G.4 facsimiles.

## 7.10.2 Help Desk Referrals

Response to user inquiries for assistance shall include, where appropriate, referral to a NANPA Subject Matter Expert.

#### 7.10.3 Help Desk Actions

Any frequently asked questions (FAQs) and their answers shall be added to the FAQ page on the web site on at least a monthly basis.

Responses shall be provided within one business day of the request being sent to the NANPA.

# 7.11 System Generated Notifications

The NAS shall support an email distribution list that both registered and non-registered NAS users can apply to and receive system generated notifications. Such email distribution list may be used to send a general notice to all users, both registered and non-registered.

## 7.11.1 Customized Notifications

The NAS shall allow users to customize notices by geographical location (*e.g.*, NPA relief planning by NPA or state) and/or resource type that allows users to select categories of notices they want to receive.

The following subjects shall warrant customized notification support:

- Instructions for users to subscribe to lists on www.NANPA.com.
- Topic and geography specific notifications.
- NPA relief planning, guideline changes, regulatory directives, NANPA process changes.
- NPA exhaust notification and relief planning.
- General broadcast of system availability.
- User education opportunities.
- New items on the web site.
- New personnel announcements.
- International activities impacting the NANP.
- Data related to the status of resources associated with state conservation deliberation.

# 7.12 System Testing

Prior to any new system functionality and feature implementation and turn up, the NANPA shall provide a System Test Plan to the FCC. This plan shall contain the selection criteria for users to participate in system testing and the timeline and specific NAS elements to be tested. The System Test Plan shall follow the format, where applicable, of Reference 26, *IEEE Standard for Software Test Documentation*.

#### 7.12.1 System Test Results

Upon completion of the NAS test, the NANPA shall publish the results of said test. These results shall be readily available to all interested parties.

# 7.13 System Disaster Recovery

A disaster recovery process shall be developed to restore the NAS within two business days. The NANPA shall develop and implement a detailed Disaster/Continuity of Operations Plan, following the format, where applicable, of Reference 27, NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs.

In the event of a disaster, the NANPA shall cover all costs associated with rebuilding or recovering the applications systems, records, and related information that existed prior to the disaster.

# 7.14 System Backup

The NANPA shall initiate and maintain a backup process that ensures that the data contained in the system can be restored as needed. System backup information shall be generated, at least daily, and stored in a secure off site location that can be accessed within one business

day if backup data is necessary for system restoration. Files shall be retained online for two years and archived for five years.

## 7.15 System and Equipment Inventory

Inventory data (hardware model, serial numbers and descriptions) on equipment shall be reported as part of the NANPA's annual reporting requirements, as well as any upgrades or replacements, including the license numbers of any Commercial Off-the-Shelf (COTS) software.

## 7.16 System Documentation Plan

The NANPA shall provide the FCC designated Contract Administrator with copies of the:

- System Design documentation describing the system's structure, modules, and interactions.
- System Operations documentation describing how to load, operate, and maintain the system.
- System User documentation describing the system and its features from the end user perspective.

This documentation should be consistent with Reference 32, *IEEE Recommended Practice* for Software Design Descriptions, Reference 33, MIL-STD-498, Computer Operation Manual (COM)-Data Item Description (DID), and Reference 29, *IEEE Standard for Software User Documentation*, respectively.

## 7.17 NANP Administration System Transfer to Successor

The NANPA shall transfer to a successor in the case of termination or at the expiration of the Term of Administration, designated hardware and software property developed with funding from this contract, including:

- NAS and its software
- Designated hardware
- Computers and related equipment
- Other peripheral devices
- Records, both current and historical

The NANPA shall provide the FCC with a list of items that are subject to transfer at the end of its term. The list shall be filed at the time of the new or modified systems acceptance. Thereafter, the NANPA shall update the list annually, and provide such list to the FCC.

## 7.17.1 Transfer Efficacy

Transfer of such physical property shall be performed in such a manner as to ensure an efficient and orderly transition of the NAS and associated equipment to a successor's environment in a fully operational state without service interruption to any client.

## 7.17.2 System Software Source Code Escrow

The FCC shall be the custodian of a copy of the source code.

## 7.17.3 System and Equipment Transfer

System equipment shall transfer with lien-free title to the FCC or the FCC's designee, without charge.

## **7.18 Tools**

The NAS shall maintain the applications and tools necessary for users to access and use the system to perform the applicable tasks and functions.

## 7.18.1 Exhaust Forecasting

Exhaust forecasting currently uses the NRUF tool. Other tools and data may be needed and used to successfully forecast NPA and NANP exhaust.

The NAS shall validate data submissions for users, process them, and then the NANPA will prepare and present an accurate NPA and NANP exhaust forecast report.

The NANPA exhaust report shall be published biannually and as warranted when information materially affecting the life of an NPA and/or the NANP becomes known to the NANPA.

The NANPA shall maintain NRUF interface specifications and post them to the NANPA web site.

The NANPA and the system shall be able to:

- Produce timely forecasts that are reasonably accurate, currently at least 36 months in advance of exhaust as indicated in INC guidelines.
- Retain the models used, the forecast and actual exhaust date for each NPA, and a comparison showing the accuracy of each model and forecast over the past five years.
- Produce the NPA Exhaust Report when new data materially affecting NPA exhaust becomes available (*e.g.*, within 30 days of NRUF deadline).
- Post all forms and job aids related to NPA Exhaust Forecasting and NANP Exhaust Forecasting for users on the NANPA web site.
- Prepare and present monthly NPA relief tracking report to NANC during the NANPA's NANC report.
- Maintain historical NRUF data by individual service provider so that it shall be available to the service provider for the previous five years. Additionally, provide service provider access to its NRUF data for the current submission cycle within the system.
- Post exhaust forecasts and actual exhaust dates (without rationing) on the NANPA web site.
- Maintain the forecasting system so that it shall be capable of accessing the five prior years of NRUF data forecasts and the corresponding actual consumption by service provider and rate area.

## 7.18.1.1 Application Processing

The NAS and tools shall provide real time access to resource usage and status data. The NAS shall support standard electronic filing capabilities, as well as on-line application processing capabilities via the NANPA web site.

#### **7.18.2 CO Codes**

Resource application submission shall be available via e-mail, on-line with the NANPA web site, and by FTP.

The NAS shall process applications by performing application data validation, resource eligibility verification, and receipt of request and acceptance/rejection notification to service providers.

The NANPA shall:

- Complete administrative forms online to avoid the need to send faxes and/or e-mail attachments. Web based tools shall be provided for use in performing code activities, including Code Requests (Part 1), In Service Notification (Part 4), and submission of MTE information.
- Provide service providers with a web-based application that confirms Part 1 data field input accuracy and consistency using drop down menus for all appropriate fields, e.g., OCN, FRN, rate area, homing tandem, switch COMMON LANGUAGE® Location Identification (CLLI<sup>TM</sup>).
- Display on its web site the status of each NXX block as (1) assigned, (2) available for assignment, to include codes in the pooling set-aside status, and (3) pending disconnect.
- Provide accurate assignments, avoid rating and/or routing conflicts, and conform to established dialing plans.
- Send a fax confirming receipt of CO Code applications to applicants who do not have electronic capabilities.

## 7.18.3 NPA Exhaust Relief Planning

The NAS shall broadly distribute all meeting notices and Initial Planning Documents (IPD) via an electronic distribution system, providing sufficient advance notice of forecasted exhaust and corresponding anticipated relief meetings.

The NANPA shall facilitate and assist regulators in understanding and approving the final industry recommendation for relief, and advise the industry, the NANC, and the FCC on its progress and the status of the approval of the NPA Relief Plan.

#### 7.18.4 Federal and State Directives/Orders

The NANPA and/or a system application shall be capable of responding to a request by a regulator for assistance and/or advice on a numbering resource issue that may affect existing processes and procedures used today by users in managing NANP resources.

Upon completion, the analysis shall be posted on the NANPA web page when information becomes releasable so that interested parties can understand the impact of the selected issue resolution.

The NANPA and the system's applications shall be capable of:

- Documenting the impact upon users in terms of: (1) the resource assignment/change/disconnect application process, (2) the application approval criteria, (3) all application forms, and (4) reports given to NANPA and reports generated by NANPA for users.
- Documenting the impact upon: (1) forecast analysis, (2) the timeliness of NPA Relief, (3) the need for rationing, and (4) the availability of numbering resources.

#### 7.18.5 Federal and State Code Conservation Data

The NAS applications shall provide prompt data updates no later than the next business day after the information has been received. The NANPA web site shall be updated in the same timeframe.

The system shall produce timely and accurate documents displaying data and statistics for all numbering resources for viewing by designated users per confidentiality requirements and data access arrangements specified by appropriate NANP member regulatory authorities. Users shall be able to check the status of resources in real-time and "look-up" specific conditions and administrative practices required by local jurisdictions, including dialing and geographic characteristics impacting the assignment and use of numbering resources. The NANPA shall prepare summaries that describe local conditions and geographic characteristics that vary from national guidelines. The system shall also maintain existing NANP administrative duties, and user application processes. The system's application shall be capable of assembling this information so that it is readily available for user access.

## 7.18.6 CIC Access and Usage Report Processing

CIC holders shall provide a usage report to the NANPA per the industry CIC guidelines. With respect to CICs subject to reclamation as a result of the NANPA's usages analysis, the NANPA shall first contact the user to verify that the CIC should be reclaimed. The NANPA shall, in accordance with industry guidelines, notify the NANC and the INC of CICs subject to reclamation and simultaneously post this information to the NANPA web site. The NAS shall be capable of accepting CIC usage reports per guideline requirements on January 31 for the period ending December 31 and no later than July 31 for the period ending June 30. These reports may also be mailed and accepted by the NANPA in paper form. The CIC holder interface specifications and programs and processing used by the NANPA when determining reclamation and recording and storing the status of CIC codes shall be posted on the NANPA web site. Any new specifications and reporting requirements shall be reviewed by the NANC prior to any change.

## 7.18.7 Contact Information

The NAS applications shall record any contact information provided by resource or subject category. The record shall contain the name, address, telephone number, company name, title and area of responsibility (i.e., code administrator, regulatory liaison for a state or the FCC), and the date the record was verified, entered or updated.

The NAS and its applications shall be capable of report generation using any of the entered fields for users and the NANPA. Such requests shall be accessible through the NANPA's web site.

Users shall use the data to facilitate contact and correspondence among the NANPA, users, the NANC, and industry fora and standards bodies.

## **7.19 Web Site**

The NANPA shall provide and maintain an Internet web site.

#### 7.19.1 Web Site Content

The NANPA web site shall contain nonproprietary data on all NANP resources administered by the NANPA. It shall also contain links to the industry guidelines, industry committees and relevant regulatory agencies, and other information to assist users in obtaining NANP numbering resources and the public with understanding NANP resources.

Table 7-1. Content on the NANPA Web Site

Category	Content		
1. NANPA Information	NANPA general information		
	All relevant contact names, updated as necessary		
	Telephone numbers		
	Facsimile numbers		
	E-mail addresses		
2. NPA Information	Assigned, reserved for possible geographic relief (Specific		
	areas not indicated)		
	Other non-available NPA codes		
	NPAs assigned by state or region		
	Locations served by NPA		
	Dialing plans per NPA		
	Relief plan, planning and implementation meetings, and		
	implementation status		

Category	Content
3. NPA NXX Code Information	NPA-NXX assigned, the carrier to which the NXX is assigned, effective date NPA-NXX test numbers Unavailable NXXs Summary of assigned and available NXXs per NPA During NPA relief activities: current data reflecting relief activity (e.g., NXX code assignments in each NPA, key dates, etc.)
4. 900 NXX Information	List of assigned 900 NXX codes and the carrier to which the NXX is assigned
5. PCS NPA NXX Information	List of assigned PCS NXX codes and the carrier to which the NXX is assigned
6. CIC Information	List of assigned CICs and the carrier to which the CIC is assigned and date assigned
7. Vertical Service Code Information	List of assigned VSCs and their respective purpose
8. 456 NXX Code Information	List of 456 NXX codes and the carrier to which the NXX is assigned
9. ANI II Digits Information	List of assigned ANI II digits and the stated purpose of the code
10. 555-XXXX Line Number Information	List of 555 line numbers and the carrier/service provider to which the 555-XXXX line number is assigned
11. N11 Service Code Information	List of assigned N11 Service Codes and a description of the service to which the N11 code is assigned
12. 800-855 Number Information	List of assigned 800-855 numbers and the carrier/service provider to which the 800-855 number is assigned
13. Description of and details on new numbering resources as may be identified and defined in the future	Information concerning any new numbering resources made available by the North American Numbering Plan (NANP)
14. INC Number Assignment Guidelines	List of links to the INC Number Assignment Guidelines
15. NANPA Planning Letters relative to NPA Code Relief ( <i>i.e.</i> , notification of assigned NPA and key dates associated with implementation)	List of all NANPA Planning Letters by year
16. Other NANPA information as directed by the NANC or appropriate regulatory authorities	Document and other information concerning number assignment and administration made by NANC and/or regulatory agencies

Category	Content
17. NANPA Reports	List of NANPA Reports concerning numbering resources (does not include enterprise service reports)  Annual report (downloadable in a machine-readable form using standard word processing and spreadsheet programs, as appropriate).
18. NANP member countries and any applicable information.	List of all NANP member companies and appropriate contact information.
19. Index of reference documentation also called the Binder of Decisional Principals	FCC related directives State directives under delegated authority Other NANP member nation directives

## 7.19.2 Content Posting

New information and documentation shall be posted to the NANPA web site within one business day of its release.

Information contained on the web site shall be updated within one business day of any change or document release.

## 7.19.3 Web Site Design

The NANPA web site (www.nanpa.com) shall be reliable and be able to quickly fulfill reasonable user expectations. The NANPA's web site shall be designed and maintained to ensure its accessibility according to the following principles:

- Maintain a NANP web site easily accessible by all users.
- Allow web site pages to be navigated by keyboard.
- Provide alternative methods to access non-textual content, including images, scripts, multimedia, tables, forms and frames for users who do not wish to display them.
- Use accepted web site features (*e.g.*, drop down menus) to provide information about the purpose and function of web site elements.
- Provide a search engine to facilitate site navigation.

## 7.19.4 Availability and Access

The NANPA web site shall be available 24 hours a day, 7 days a week.

The web site shall be able to support up to 500 simultaneous users with an average holding time of 0.5 hours.

## 7.19.5 System Responsiveness

The NANPA shall provide rapid response when accessing the web site. The NANPA shall provide a system such that a 56 Kbps modem-equipped user will be able to view the complete home page in less than 8 seconds, 95% of the time over any 12-month period.

If a user is experiencing greater than 12 seconds to view the complete home page, the NAS shall have the capability to sense this condition. The NANPA shall open a trouble ticket to investigate whether the problem is between the web site and the Internet Service Provider (ISP) or is in the NAS. If the user reports to the help desk a problem with accessing information on either the web site or the NAS, a trouble ticket shall be initiated to determine if an "out of service" condition exists.

#### 7.19.6 Out-of-Service

The NANPA web site shall be operational 99.9% of the time over any 12-month period, excluding scheduled maintenance. NANPA's inability to deliver services at this level shall be deemed "out of service." This figure excludes problems due to the customer's network or equipment.

All scheduled maintenance activities shall occur during non-core business hours, shall require prior approval of the FCC, and shall not exceed a four-hour period unless approved by the FCC.

The NAS shall be capable of "pinging" its ISP(s) every five seconds to confirm that the round-trip latency is less than or equal to 10 milliseconds. If the latency is greater than 10 milliseconds, the connectivity between the web site and ISP(s) shall be considered out of service and a trouble ticket opened.

## 7.19.7 Out-of-Service Notification

The NANPA shall be the point of contact for system recovery. The NANPA shall be capable of distributing system status and outage reports to all registered users.

All scheduled maintenance activities shall be approved in advance by the FCC prior to commencing the activity. Once the FCC has approved the scheduled maintenance activity, the NANPA shall provide notification to all registered users as to when the activity will begin and end, as well as the impact on the users.

## 7.19.8 Web Site Privacy

Web site privacy shall be monitored every time content and transaction functionality is added or changed to avoid any risk of exposing the web site to privacy risks and inappropriate access to the content.

## 7.19.8.1 Privacy Management

Privacy management shall include the rules that govern the collection, use, retention, and distribution of data. It shall address the privacy needs of users by assessing the risks to confidential data; managing the implementation of privacy policies and associated procedures; ensuring on-going compliance; monitoring developments, accommodating changes, and raising awareness within the NANPA's organization; and training NANPA staff.

## 7.19.8.2 Privacy Compliance

The NANPA's privacy practice shall contain details listing the compliance with the Gramm-Leach Bliley Act of 1999 regarding regulating the privacy of personally identifiable, non-public financial information in the United States, and the privacy requirements per the Personal Information Protection and Electronic Documents Act in Canada. The NANPA shall prominently display its privacy statement explaining NANPA's information handling practices.

## 7.19.8.3 Privacy Breaches

The NANPA shall monitor web site access to ensure that identified privacy practices are not compromised in any fashion.

Any web site data privacy breach shall be documented and reported to the affected user and the appropriate regulatory authority. The NANPA shall report the web site privacy breach to the FCC.

## 7.19.9 Maintenance of NANC Chair Web Site

The NANPA shall support and maintain an independent web site, the NANC Chair web site (www.nanc-chair.org). The NANPA is the administrator of the NANC Chair web site and as such shall be required to maintain the web site in the same manner (e.g., accessibility, security) as the NANPA web site.

## 7.19.8.4 Responsibilities

The NANC Chair web site administrator shall post documents as requested by NANC members, members of the industry and regulatory agencies to the web site in a timely manner prior to NANC meetings. In addition, the administrator shall post documents and meeting records from the NANC's designated supporting groups, *e.g.*, Working Groups and Issue Management Groups (IMGs), and make those records easily accessible. Finally, the NANPA will secure appropriate transcription services to be used for providing a written record of NANC meetings.

#### 7.19.8.5 Content

The following is a partial list of the content contained on the NANC Chair web site:

- Links to relevant web sites (*e.g.*, those administered by the FCC, the NANPA, and the INC).
- Specific documentation (e.g., NANC meeting minutes).
- Working Group and IMG documentation (e.g., meeting records, work in progress).
- NANC, Working Group, IMG, and appropriate industry forum meeting dates by calendar year.

#### Section 8

# Reporting

The following section discusses the numbering resource reports and the web site requirements for the NANPA.

NANPA reporting shall take three forms: the first form shall be as an update to a table or document on the NANPA web site; the second form shall be as an electronic attachment to an e-mail distribution list; the third form shall be as paper documents physically distributed at meetings.

The NANPA shall provide regular reports on all NANP numbering resources to the NANP distribution list. The NANPA shall provide reports in March and in September on all numbering resources administered by the NANPA. Reports shall contain a written summary interpreting trends and the impact of new data upon numbering resources and the NANP in general. The report shall contain, at a minimum, the following information:

- Assignments (assigned and available resource)
- Assignment rates
- Historical trends
- Projections (e.g., NPA exhaust)
- Triggers for user action

The NANPA shall report semi-annually its projection for NANP exhaust. Further, the NANPA shall notify the FCC, the NANC and other necessary parties of any significant changes, as they occur, that might substantially alter the NANP exhaust projection. The report format shall be subject to change and shall include any other information the NANC or the FCC deem necessary. The reports shall be for all resources not in a designated form of jeopardy. For those jeopardy resources the NANPA shall publish reports on a monthly basis when there are high assignment rates and the resources are in danger of being depleted within two years.

In addition, the NANPA shall identify and develop other reports deemed necessary for managing the NANP resources in the future.

# 8.1 Annual Report

The NANPA shall publish this document annually to report on the status of the NANP, NPAs, and CO Codes.

The report shall be published during the first quarter of each year. It shall contain the results of the previous year-end NRUF survey results. The annual report shall also be reviewed during the NANC annual performance review process.

The annual report shall contain at a minimum, but not be limited to:

- Brief description of the NANP
- Historical trends
- Highlights/significant milestones reached during previous year

- Current NPA Code assignment listings-Alphabetical by State/Province and in numerical order
- Current list of reserved NPAs
- NRUF forecast results-Current year forecast
- Exhaust projections for individual NPAs and the NANP
- Status of NPA Codes
- NPA-specific dialing plans
- Description of all numbering resources assigned by the NANPA and appropriate points of contact
- Activities identified in the Annual Report shall also be placed on the NANPA web site

# 8.2 NRUF Report

This report shall be produced and delivered to the FCC, to the NANP member nations, and the NANC. The NANPA shall provide aggregated forecast and utilization data to any requesting U.S. state user twice per year consistent with the dates of the NRUF reporting process.

Within ten calendar days of the request, the NANPA shall provide to any requesting state commission a single report containing only disaggregated data reported by service providers in that state, so long as the request is made 30 days after the deadline for NRUF reporting and before the subsequent NRUF reporting deadline.

Because state commissions might wish to perform their own data analyses, the NANPA shall provide the data to requesting states via electronic transfer, which may include e-mail, or by computer disk. In the alternative, upon request from a state commission, the NANPA shall provide the data in paper copy form without additional charge to the state commission.

## 8.2.1 Data Anomalies

The NANPA shall provide a statement of any identified anomalies along with documented explanations for each anomaly in all NRUF reports to assist users in assessing the reports' impact and results.

These reports shall serve several different functions, including the following:

- Assist in interpreting the NRUF data.
- Review the NANPA's data management and analytical performance.
- Assess the effectiveness of numbering resource optimization efforts.

## **8.2.2** Reports to Regulatory Authorities

The NANPA shall produce a list of all standardized NRUF data reports offered to users. The NANPA and interested regulatory authorities shall meet annually to determine the reports' format and content. These reports shall be produced by the NANPA upon demand from an appropriate regulatory authority, and at no charge to the requestor. Agreed-upon changes or modifications to these reports shall be at no charge to the requestor.

These reports, once requested by a regulatory authority, shall be delivered continually until the regulatory authority notifies the NANPA otherwise. The NANPA shall also be prepared to produce a state-level summary of any of the NRUF reports.

Comparison calculations shall properly compensate for the change in geographic coverage of both existing and new NPAs within areas that experienced area code splits during the designated reporting periods.

The list below is not meant to be exclusive of any information, nor of the extent or format of the data requested and required by regulatory authorities or other users. These reports shall support a variety of formats, including, but not limited to, text, Microsoft Excel, and Microsoft Access.

- Number of carriers in a rate center and/or NPA, identified by type. The NANPA shall produce on an as-needed basis a report that identifies the number of carriers that provided a NRUF report in a rate center and/or an NPA categorized by type as defined in FCC Form 502.
- Comparison of actual NPA exhaust with past five exhaust projections. To test the assumptions and gauge the NANPA's accuracy, the NANPA shall produce annually in April and in September reports that compare the actual exhaust dates of each NPA with the NANPA's projections for that NPA over the previous five reporting periods.
- Comparison of most recent NPA and NANP exhaust projections with past five exhaust projections. To test the assumptions and gauge the NANPA's accuracy, as well as to identify any problems that need to be addressed immediately, the NANPA shall produce reports that compare the most recent projected exhaust dates of NPAs and the NANP with the projected exhaust dates of the previous five reporting periods.
- Comparison of aggregated or disaggregated Service Provider (SP) forecasts in an NPA with actual growth, with and without rationing. To gauge the accuracy of SP forecasts, the NANPA shall produce in April and in September reports that compare previous (aggregated) SP forecasts within an NPA with actual code demand for that same NPA.
- Comparison of actual unidentified demand with non-forecasted demand growth additive.
  To test the validity of the non-forecasted demand growth additive formula being used,
  the NANPA shall produce a report in April and in September (after three reporting
  periods) that compares the output of the formula with the actual quantity of nonforecasted demand that materialized.
- CO Code growth rate by NPA. The NANPA shall produce a semi-annual report that provides the CO Code growth rate by NPA for the current and previous five reporting periods. The NANPA shall also produce a report that compares aggregated growth rates in pooled NPAs with growth rates in those NPAs prior to pooling. To test any conclusions drawn from this report, the NANPA shall also compare growth rates over the same period of time in NPAs that have not been pooled.

# 8.3 NPA Relief Activity Status Report

The NANPA shall report the status of NPA relief planning efforts to the FCC and the NANC, and post its report on the NANPA and NANC-chair web sites on a monthly basis. The report shall contain the following categories:

Category	Detail		
NPA	NPA needing relief.		
Jurisdiction	NANP member country, state, and locality of NPA needing relief.		
Date Relief Need Identified	Date the NANPA determined that relief was needed.		
Declaration Date	Date the NANPA notified the industry and regulators.		
Exhaust Date upon Declaration	Projected exhaust date when the need was declared.		
Current Exhaust Date	Current projection for exhaust.		
Forecasted Exhaust Date	The exhaust date of the NPA based on the latest NRUF data.		
Number of Remaining NXXs	Number of NXXs that are available for assignment.		
Number of Unavailable NXXs	Number of NXXs that are unavailable for assignment.		
Initial Relief Planning Meeting Notice Date	Date the first NPA relief planning meeting notice was distributed.		
Actual Filing Date	The date relief plan was actually filed with the appropriate regulatory authority.		
Requested Implementation Date	The requested date included in the relief plan when NPA relief shall take place, <i>e.g.</i> , end of mandatory dialing for a split, or the effective date for an overlay. When no date is requested, "none" is indicated.		
Requested Relief Type	The recommended NPA relief solution indicated in the relief plan filed with the state commission if the industry was able to reach consensus. In some circumstances, the industry may have reached consensus on more than one alternative.		
Requested Approval Date	The date indicated in the relief plan that regulatory authority approval is requested.		
Approval Date	The date the relief plan was approved by the regulatory authority.		
Approved Relief Type	The type of relief plan approved by the regulatory authority ( <i>e.g.</i> , split, overlay).		

Category	Detail
Approved Implementation	The date the regulatory authority has directed that the new
Date	NPA is to be implemented, <i>e.g.</i> , end of mandatory dialing for a split or the effective date for an overlay. In certain situations, a relief implementation date is not provided. The date may be determined at a later time or a trigger is identified ( <i>e.g.</i> , 60 days after the last NXX code is assigned in the existing NPA).
First Scheduled Implementation Meeting	The date of the initial NPA implementation meeting that the NANPA shall conduct.
Rationing Date	Date rationing began. If no rationing, leave blank.
Jeopardy Declared	Date on which jeopardy was declared.

## 8.4 CO Code Activity Status Report

The NANPA shall report the CO Code activity status to the FCC and the NANC, and post on both the NANPA and NANC-chair web sites a monthly status report. This report shall reflect the CO Code administration activity by state, and applicable NANP member country. The report shall contain the following categories:

Category	Detail	
New Applications	All applications that the NANPA is handling for the first time.	
Assignments	The number of applications that resulted in the assignment of a new central office code.	
Denials	The number of applications that were denied because the applicable criteria were not met.	
Reclamations	The number of assigned central office codes reclaimed by the NANPA or returned by the assignee.	
Total	The sum of the above categories, equal to the total number of applications processed.	

# 8.5 Other NANP Activity and Status Reports

The NANPA shall provide a status report on any activity that occurs with other NANP resources that it administers. These reports shall be provided to the FCC, the NANC and posted on the appropriate web sites on a monthly basis. The reports shall provide details as appropriate to the resource and the activity, including the NANP member country in which the activity occurred.

# 8.6 Requests for Additional Reports

The NANPA may also be requested to produce additional reports as needed.

The NANPA may create and provide data in different formats to accommodate requests to cull data and provide customized reports as enterprise services for a fee that is reasonable and based on its costs. (*See* Section 11 for details on enterprise services).

Note that enterprise services shall be reviewed by the NANC and approved by the FCC, but, once approved, the NANPA shall be free to negotiate a reasonable price with requestors.

#### 8.7 Reference Documentation

The NANPA shall maintain and make readily available an addendum of reference documentation to assist interested parties. The list shall include the most recent version of all guidelines and all NANP-related regulatory directives and requirements. This addendum shall be posted on the NANPA web site and updated as needed.

## 8.8 Standardized Reports for State Commissions

The NANPA shall produce a series of standardized reports on CO Code assignment activity. A weekly report of codes assigned and available by NPA shall be available on the NANPA public website and, at a minimum, include the following information:

- NPA-NXX
- Use (Available, Assigned, Protected, Reserved, Unavailable)
- OCN
- Company
- Rate Center
- Initial/Growth
- Assignment Date
- Effective Date

This same report will be available in the password protected portion of NAS and will include switch information in addition to the above data elements.

In addition, the NANPA shall provide a report on the NANPA public website that includes the quantity of CO Codes assigned by the NANPA on a monthly basis. The report shall include the following information:

- ST-State
- NPA-Area code
- NPA Status (e.g., jeopardy, exhausted)
- Monthly Rationed Amount
- Total Number on Priority List-If an NPA is in rationing and a priority list is used, the total number of code requests on the priority list
- Month-Each month of the year and the quantity of codes assigned in that month
- Current Month's Return-The total number of codes returned to the NANPA and made available for assignment
- Year-to-date Returns-The total number of codes returned up through the last reported month

- Protected-The number of protected codes
- Total Unavailable-The total number of codes unavailable for assignment; these include codes assigned, reserved or otherwise unavailable for assignment
- Total Available-The total number of codes available for assignment (i.e., vacant codes)

NANPA will also provide a state-specific report to those states with appropriate confidentiality protections in place that contains pertinent information from the Part 1 application submitted by service providers and information from the Part 3 response. States will be able to select daily, weekly or monthly distribution of this report.

# 8.9 Summary of NANPA Technical Reports

**Table 8-1 Summary of Technical Reports** 

Name	Reference	Frequency
Numbering Plan Area	8.0	Weekly and Monthly. Biannually in March and in September.
Central Office Code Status	4.1, 4.2.2, 4.2.4, 8.0	Assigned and available posted daily; status monthly. Biannually in March and September.
International Inbound NPA Code	8.0	Within five days of a new assignment; status monthly. Biannually in March and September.
Personal Communications Service Code	8.0	NRUF form semi-annually; upon any new assignment. Status monthly. Biannually in March and September.
900 Code	8.0	NRUF form semi-annually; upon any new assignment. Status monthly. Biannually in March and September.
800 Code	8.0	Semi-annually; status monthly. Biannually in March and September.
N11 Code	8.0	Semi-annually; status monthly. Biannually in March and September.
555 Code	8.0	New assignments within five days; status monthly. Biannually in March and September.
Carrier Identification Code	6.18.6, 7.5, 9.5.2.4 3.9	Semi-annual incorporating Entity Usage 1 Access Reports; upon any new assignment. Status monthly. Biannually in March and September.

Name	Reference	Frequency
Vertical Service Code	7.18.6, 8.0	Existing VSCs, new VSCs, and updates; status monthly. Biannually in March and September.
Automatic Number Identification	8.0	Existing ANI, new ANI, and new assignments within five business days; status monthly. Biannually in March and September.
Numbering Resource Utilization Form	3.2, 6.0, 6.1.5, 8.0, 8.2.2	Semi-annually on February and August 1st.
Code Relief Planning Report to NANC	5.1.5	Quarterly.
Status of Pending Relief Plans	5.1.9	Monthly, to FCC/NANC.
Contact List Maintenance	4.4, 6.1.2, 7.7	Quarterly.
NANP/NPA Exhaust Analysis	6.16, 7.18.1	Contingent upon material impact and annually.
NPA/NANP Life Impact	6.1.8	Contingent, within 30 days of receipt of the updated NRUF Report.
Reports to Regulatory Authorities	6.1.9, 8.2.2	Contingent, within ten days of request following 30 days after the NRUF reporting deadline.
NRUF Anomalies	6.1.11, 6.3.3, 8.2.1	Contingent, in case of unresolveable anomalies, to State Regulatory Commissions or FCC. Also annually.
NANC Annual Report	7.10, 7.15, 8.1	Annually during first quarter.
CO Code Growth Rate by NPA	8.2.2	Semi-annually.
Aggregated Growth Rates, Pooled vs. Non-Pooled	8.2.2	Upon demand.
Aggregated Utilization Data	8.2.2	Upon demand.
NPA Relief Activity Status Report	8.3	Monthly.
Disaggregated Data by State	8.2	By request, 30 days after the deadline for NRUF reporting and before the subsequent NRUF reporting deadline.
Number of Carriers in rate center and/or NPA, by Type	8.2.2	Upon demand.
Comparison of Actual NPA Exhaust, with Past Five Exhaust Projections	8.2.2	Upon demand.
Comparison of Most Recent NPA/NANP Exhaust Projections with Past Five Exhaust Projections	8.2.2	Upon demand.
Comparison of Aggregated SP Forecasts in a NPA with Actual Growth, with and	8.2.2	Upon demand.

Name	Reference	Frequency
without Rationing		
Comparison of Actual Unidentified Demand with Non-Forecasted Demand Growth Additive	8.2.2	Upon demand.
Standardized Report for State Commissions on CO Codes Assigned by the NANPA	8.4, 8.8	Weekly and monthly.
Part 4 Form Delinquency Notifications	4.4	Contingent, for code holders not submitting Part 4 forms.
Relief Planning Report	5.1.5	Quarterly.

# 8.10 Summary of NANPA Performance Reports

**Table 8-2 Summary of Performance Reports** 

Name	Reference	Frequency
Customer Response Rates	2.7.1	Contingent and annual.
Dispute/Plan of Action	2.1.2	Contingent, to be prepared within one business day.
Self-Assessment	7.10, 9.5	Annually and Quarterly to NANC.
Post-Audit Corrective Action Plan	9.1.4	Within 20 days after receipt of the auditor's report and monthly until completion.
Unauthorized User Access	2.13.5, 7.7.9	Contingent upon occurrence.
System Outage	7.19.7	Contingent upon occurrence to all clients.
Privacy Breach	7.19.8.3	Contingent upon occurrence, to affected client, regulatory authority, and FCC
Complaints	2.1.2, 7.10	Contingent, to be prepared within one business day.

#### **Section 9**

# **Audits and Performance Monitoring**

## 9.1 Audit by FCC

The NANPA shall be subject to audits by the FCC or its designees that include the following:

- Compliance with industry guidelines
- Compliance with regulatory directives
- Conflict of Interest
- Neutrality
- NANPA operations and financial viability
- Record verification
- Facilities
- Security
- Enterprise Services

## 9.11 Staff Support

The NANPA shall provide the FCC or its designee access during normal business hours to the NANPA's staff and books, records, and supporting documentation relating to the NANPA function being audited.

#### 9.12 Office Facilities

The NANPA shall provide office space, office furnishings, telephone and facsimile service, utilities, office-related equipment, and duplicating services that auditors may require to perform audits.

## 9.13 Audit Results

The NANPA shall make audit results available to the public in a limited manner that protects any confidential information. The NANC shall receive a detailed summary of the audit results such that the content shall not identify any service provider.

If any audit results in the NANPA being notified that it is not in compliance with any law, regulation, or requirement relating to its administration, the NANPA shall be required to take actions to correct any non-compliance.

## 9.14 Compliance

The NANPA shall present a corrective action plan to the NANC within 20 days after the receipt of the auditor's report. The NANPA shall report monthly, or more frequently if appropriate, on the status of compliance efforts and notify the NANC upon completion of the corrective action plan.

In the event that the NANPA does not meet these obligations, all remedies, including termination, may be utilized to correct the default.

The NANPA shall bear the complete expense of compliance activities that arise out of the implementation of a corrective action plan.

#### 9.2 Monitoring

#### 9.2.1 NANPA Client Feedback Survey

The FCC or its designee shall develop a formal feedback survey to permit all interested parties to provide performance assessment data and recommendations to the NANC. The NANPA shall be responsible for working with the FCC or its designee in developing a methodology to recover the cost associated with hosting an on-line client feedback survey if such a mechanism is used.

#### 9.2.2 NANPA Annual Operational Review

The NANPA shall undergo an annual operational review to be conducted by the NANC or its designee in conjunction with the FCC.

The operational review shall consist of a review of appropriate NANPA operations and facilities to ensure that the NANPA is performing its functions and responsibilities in accordance with the requirements of the contract. The NANPA shall ensure that all data provided to the group conducting the operational review adheres to service provider confidentially requirements.

The operational review shall at a minimum, contain the following information:

- State of the NANPA job aids and employee tools
- Status of the system
- Status of security plans and disaster recovery activities
- Status of NPA relief planning activities
- Status of NXX assignments
- Status of NRUF data collection and analysis activities
- Status of CIC, PCS NPA-NXX, 900 and other resources administered
- Status of continuing education programs for employees to ensure a knowledgeable workforce

#### 9.2.3 Performance Problems and Corrective Action

The NANPA shall implement remedial action, at no charge, to correct any identified performance problems.

The NANPA shall develop a Performance Improvement Plan (PIP) that addresses each area identified that requires performance improvement along with a time for completion. The PIP shall be presented to the NANC for review and acceptance prior to implementation.

This presentation shall be at the NANC meeting following the NANC's acceptance of that year's performance review report. The annual assessment process shall not preclude telecommunications industry participants from identifying performance problems to the NANPA and the NANC as they occur, and from seeking resolution of such performance problems in an expeditious manner.

#### 9.3 Performance Monitoring

The performance monitoring process shall include, but not be limited to, an internal, documented performance monitoring mechanism to be developed and implemented by the NANPA and made available to the NANC and the FCC.

#### 9.4 NRUF-Related Measurements

The review of the NANPA's responsibilities with respect to how well it discharged its duties related to NRUF shall include the following:

- Identification of all service providers utilizing NANP resources, including the maintenance of an up-to-date list of contacts for each service provider obtained from the semi-annual NRUF report and any subsequently updated contact information.
- Distribution of notification of NRUF reporting requirements to all service providers allocated NANP resources.
- Timely analysis of data.
- Review of data to ensure service provider compliance with reporting requirements, including frequency and granularity.
- Timely follow-up with carriers and regulators, as needed to ensure compliance.
- Performance of tests for inconsistencies and anomalies, to include identification of missing utilization for assigned central office codes and one thousand blocks.
- Accuracy of tests for inconsistencies and anomalies.
- Accuracy and timeliness of calculation of exhaust projections for the NANP and individual NPAs.
- Timely notification to the NANC and industry of problems and unusual activity.
- Responsiveness to federal and state regulators.
- Responsiveness to industry.

#### 9.5 Self Assessment and Reporting

The NANPA shall provide a self-assessment of its performance. An annual and quarterly report shall be delivered to the NANC or its designee within 30 days of the measurement period. The NANPA shall provide the following information:

- Summary of areas in which NANPA experienced difficulty and how the NANPA corrected the problem (NANPA internal and external difficulties included).
- Incidences of user dissatisfaction and a description of the action taken by the NANPA to ensure the problem shall not reoccur.

- A summary tally of written and oral complaints identified by performance metric.
- A summary list of major issues addressed by the NANPA including an evaluation of how the NANPA's activities influenced the outcome and how this outcome affected users.

#### Section 10

# **Contract Data Requirements List (CDRL)**

All CDRLs shall be approved by the FCC.

#### **10.1 Implementation Plan**

The contractor shall provide an Implementation Plan per Section 2.14 within 30 days of contract award and an update to that Plan 30 days prior to the takeover of NANP Administration.

#### 10.2 Security Plan

The contractor shall provide a Security Plan per Section 7.6 within 45 days of contract award and an update to that Plan 30 days prior to the takeover of NANP Administration. The Security Plan shall be updated annually 45 days prior to the beginning of each Option Year.

#### 10.3 Disaster/Continuity of Operations Plan

The contractor shall provide a Disaster/Continuity of Operations Plan per Section 7.13 within 60 days of contract award. The Plan shall be updated annually 30 days prior to the beginning of each Option Year.

## 10.4 NANP Administration System Transfer List

The contractor shall provide the NANP Administration System Transfer List per Section 7.17 at the time of the new or modified systems acceptance and the list shall be updated annually.

## 10.5 System Test Plan

The contractor shall provide a System Test Plan within 75 days of contract award and whenever significant changes or modifications are made to the system per Section 7.12.

## 10.6 Change Management Plan

The contractor shall provide a Change Management Plan per Section 4.1 within 90 days of contract award.

## 10.7 Contract Change Management Plan

The contractor shall provide a Contract Change Management Plan for implementing the requirements of Section 2.10 within 90 days after the start of the first Option Year. The Plan shall be reviewed and updated annually 60 days prior to the beginning of each Option Year.

#### 10.8 Training Plan

The contractor shall provide a Training Plan per Section 4.1 within 105 days of contract award. The Plan shall be reviewed and updated annually 30 days prior to the beginning of each Option Year.

#### 10.9 System Maintenance Plan

The contractor shall provide a System Maintenance Plan per Section 7.5 prior to new or modified system acceptance. The Plan shall be reviewed and updated annually 120 days prior to the beginning of each Option Year.

#### 10.10 System Documentation Plan

The contractor shall provide a System Documentation Plan per Sections 2.15.3 and 7.16 at the time of the new or modified systems acceptance and the plan shall be updated annually.

#### 10.11 Performance Improvement Plan

The contractor shall provide a Performance Improvement Plan per Section 9.2.3 on an annual basis following the NANC's acceptance of each year's performance review report.

#### 10.12 Transition Plan

The contractor shall provide a Transition Plan per Section 2.15.4 180 days prior to contract termination.

## **10.13 System Source Code**

The contractor shall provide the system source code, in machine-readable form, 180 days prior to contract termination.

#### **Section 11**

## **Enterprise Services**

Enterprise services are additional services that may be provided, for a specific fee, by the NANPA. These are described as services that the NANPA can provide but are limited to meeting the needs of a limited number of customers.

Enterprise services and their associated fees are subject to prior review by the NANC and approval by the applicable regulatory authorities before they can be implemented and made available to the requestor(s).

#### 11.1 Operating Principles

The following operating principles apply to the provision of enterprise services:

- The fees associated with enterprise services shall be fair and reasonable.
- Enterprise service fees for the same service must be the same for all customers.
- Enterprise services must be performed without jeopardizing NANPA duties and responsibilities.
- Proprietary/confidential information provided to the NANPA shall be protected in the provision of any enterprise service.
- Fees associated with an enterprise service shall be collected by the NANPA or the designated billing and collection agent, depending on the NANC recommendation and FCC approval.
- Fees for enterprise services are independent of the price of this contract.

#### 11.2 Required Enterprise Service

The NANPA is required to support the following enterprise services:

- Provide rating and routing input to BIRRDS upon request from code applicants (Administrative Operating Company Number [AOCN] function). The information is contained in Part 3 of the CO Code Administration Guidelines. This includes reviewing the information, assisting in the preparation of the information and the actual inputting of the information in the associated database.
- Provide input of paper submissions (e.g., NRUF data, CO Code applications), either fax or mailed copies, into the system.
- Provide testimony in state regulatory hearings. Any costs associated with testifying in such regulatory hearings shall be treated as enterprise services.

## 11.3 Audit of Enterprise Services

Any and all approved Enterprise Service(s) will be subject to an audit by an independent auditor.

The NANPA will contract with an auditor to have an audit of all enterprise service offerings the first, third and fifth year of their Term of Administration. The audit report will be conducted during the second quarter of the reporting year and the auditor's report must be provided to the NANC and all appropriate regulatory agencies in the third quarter of the reporting year.

# **List of References**

- Federal Communications Commission: In the Matter of Number Resource Optimization, Report and Order and Further Notice of Proposed Rule Making, CC Docket 99-200, FCC 00-104 (March 31, 2000). Available at: http://www.fcc.gov/Bureaus/Common Carrier/Orders/2000/fcc00104.pdf.
- 2. Federal Communications Commission: *In the Matter of Numbering Resource Optimization, Second Report and Order, Order on Reconsideration in CC Docket No. 96-98 and CC Docket No. 99-200, and Second Further Notice of Proposed Rule Making in Docket 99-200,* CC Dockets 99-200 and 96-98, FCC 00-429 (December 29, 2000). Available at: <a href="http://hraunfoss.fcc.gov/edocs\_public/attachmatch/FCC-00-429A1.pdf">http://hraunfoss.fcc.gov/edocs\_public/attachmatch/FCC-00-429A1.pdf</a>.
- 3. Federal Communications Commission: *In the Matter of Administration of the North American Numbering Plan*, CC Docket 92-237 (October 9, 1992). Available at: <a href="http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=10">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.gov/prod/ecfs/retrieve.gov/prod/ecfs/retrieve.gov/prod/ecfs/retrieve.gov/prod/ecfs/retrieve.gov/prod/ecfs/retrieve.gov/prod/ecfs/retrieve.gov/prod/ecfs/retrieve.gov/prod/ecfs/retrieve.gov/prod/
- 4. Federal Communications Commission: *In the Matter of Use of N11 Codes and Other Abbreviated Dialing Arrangements*, CC Docket 92-105 (May 4, 1992). Available at: <a href="http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=1021280001">http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\_or\_pdf=pdf&id\_document=1021280001</a>.
- 5. Dorothy Attwood: *Letter from the FCC Chief of the Common Carrier Bureau to NANPA*, June 25, 2001.
- 6. Industry Numbering Committee: *Industry Numbering Committee (INC) Thousands-Block Number (NXX-X) Pooling Administration Guidelines,* (ATIS-0300066, (February 11, 2008), by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 7. Industry Numbering Committee: *Industry Numbering Committee (INC) North American Numbering Plan Numbering Resource Utilization/Forecast Reporting (NRUF) Guidelines*, ATIS-0300068 (November 9, 2007), by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.

- 8. Industry Numbering Committee: *Industry Numbering Committee (INC) Central Office Code (NXX) Assignment Guidelines*, ATIS-0300051 (January 18, 2008) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 9. North American Numbering Council: *Number Administration Auditor Technical Requirements* (July 18, 2000) by the North American Numbering Council. Available at: http://www.fcc.gov/ccb/Nanc/FinAudReg.rtf.
- 10. North American Numbering Council: *NANC Audit Framework* (November 16, 1999) by the North American Numbering Council. Available at: http://www.fcc.gov/ccb/Nanc/1116audit.pdf.
- 11. Industry Numbering Committee: *Industry Numbering Committee (INC) Automatic Number Identification (ANI) Information Digit Codes*, ATIS-0300064 (September 18, 1998) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: http://www.atis.org/atis/clc/inc/incdocs.htm.
- 12. Industry Numbering Committee: *Industry Numbering Committee (INC) 900-NXX Code Assignment Guidelines*, ATIS-0300060 (November 9, 2007) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 13. Industry Numbering Committee: *Industry Numbering Committee (INC) 555 NXX Assignment Guidelines*, ATIS-0300048 (May 13, 2005) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 14. Industry Numbering Committee: *Industry Numbering Committee (INC) Personal Communications Services N00-NXX Code Assignment Guidelines*, ATIS-0300052 (October 12, 2007) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 15. Industry Numbering Committee: *Industry Numbering Committee (INC) Carrier Identification Code Assignment Guidelines*, ATIS-0300050 (August 10, 2007) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee,

- sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 16. Industry Numbering Committee: *Industry Numbering Committee (INC) 800-855 Number Assignment Guidelines*, ATIS-0300047 (March 23, 2004) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 17. Industry Numbering Committee: *Industry Numbering Committee (INC) Vertical Service Code Assignment Guidelines*, ATIS-0300058 (February 28, 2000) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: http://www.atis.org/atis/clc/inc/incdocs.htm.
- 18. Industry Numbering Committee: *Industry Numbering Committee (INC) NPA Allocation Plan and Assignment Guidelines*, ATIS-0300055 (November 9, 2007) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 19. Industry Numbering Committee: *Industry Numbering Committee (INC) NPA Code Relief Planning and Notification Guidelines*, ATIS-0300061 (November 9, 2007) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: http://www.atis.org/atis/clc/inc/incdocs.htm.
- 20. Industry Numbering Committee: *Industry Numbering Committee (INC) Location Routing Number Assignment Practices*, ATIS-0300065 (December 1, 2006) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 21. Industry Numbering Committee: *Industry Numbering Committee (INC) Uniform Dialing Plan*, ATIS-0300059 (July 1998) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 22. Industry Numbering Committee: *Industry Numbering Committee (INC) International Inbound NPA (INT/NPA/NXX) Assignment Guidelines*, ATIS-0300049

- (March 23, 2004) by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: <a href="http://www.atis.org/atis/clc/inc/incdocs.htm">http://www.atis.org/atis/clc/inc/incdocs.htm</a>.
- 23. Federal Communications Commission: FCC Computer Security Program, FCCINST 1479.3 Effective Date, June 2008.
- 24. IEEE-SA Standards Board: *IEEE Standard for Software Test Documentation, IEEE Std 82901998*. Available at http://standards.ieee.org/catalog/olis/index.html
- 25. National Fire Protection Association: NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs, 2000 Ed. Available at <a href="http://www.nfpa.org/">http://www.nfpa.org/</a>
- 26. Space and Naval Warfare Systems Command (SPAWAR): *Software Transition Plan (STrP), DI-IPSC-81429.* 10 January 2000. Available at <a href="http://www.ihsengineering.com/">http://www.ihsengineering.com/</a>
- 27. IEEE-SA Standards Board: *IEEE Standard for Software User Documentation*. December 5, 2001. Available at <a href="http://standards.ieee.org/catalog/olis/index.html">http://standards.ieee.org/catalog/olis/index.html</a>.
- 28. National Institute of Standards and Technology: *Guide for Developing Security Plans for Information Technology Systems, NIST Special Publication 800-18*. December 1998. Available at <a href="http://crsc.nist.gov/publications/nistpubs/800-18/planguide.pdf">http://crsc.nist.gov/publications/nistpubs/800-18/planguide.pdf</a>.
- 29. Neustar, Inc: *NANP and NPA Exhaust Analysis*, (most recent) by NeuStar, Inc, 46000 Center Oak Plaza, Sterling, VA 20166.
- 30. IEEE-SA Standards Board: *IEEE Recommended Practice for Software Design Descriptions*, September 23, 1998. Available at <a href="http://standards.ieee.org/catalog/olis/index.html">http://standards.ieee.org/catalog/olis/index.html</a>.
- 31. Department of Defense, Computer Operation Manual (COM)-Data Item Description (DID), MIL-STD-498, December 5, 1994.

# Appendix A

# **Terms**

**ANI II Digits.** Automatic Number Identification (ANI) II digits are two-digit pairs sent with the originating telephone number. These digits identify the type of originating station.

**Table of Assigned ANI Information Digits Codes** 

DIGITS	DESCRIPTION
00	Plain Old Telephone Service (POTS) - non-coin service requiring no special treatment
01	Multi-party line (more than 2) - ANI cannot be provided on 4 or 8 party lines. The presence of this "01" code shall cause an Operator Number Identification (ONI) function to be performed at the distant location. The ONI feature routes the call to a CAMA operator or to an Operator Services System (OSS) for determination of the calling number.
02	ANI Failure - the originating switching system indicates (by the "02" code), to the receiving office that the calling station has not been identified. If the receiving switching system routes the call to a CAMA or Operator Services System, the calling number may be verbally obtained and manually recorded. If manual operator identification is not available, the receiving switching system (e.g., an inter-Local Access Transport Area [LATA] carrier without operator capabilities) may reject the call.
06	Station Level Rating - The "06" digit pair is used when the customer has subscribed to a class of service in order to be provided with real time billing information. For example, hotel/motels, served by PBXs, receive detailed billing information, including the calling party's room number. When the originating switching system does not receive the detailed billing information, <i>e.g.</i> , room number, this "06" code allows the call to be routed to an operator or operator services system to obtain complete billing information. The rating and/or billing information is then provided to the service subscriber. This code is used only when the directory number (DN) is not accompanied by an automatic room/account identification.
07	Special Operator Handling Required - calls generated from stations that require further operator or Operator Services System screening are accompanied by the "07" code. The code is used to route the call to an operator or Operator Services System for further screening and to determine if the station has a denied-originating class of service or special routing/billing procedures. If the call is unauthorized, the calling party shall be routed to a standard intercept message.
10	Not assignable - conflict with 10X test code
12-19	Not assignable - conflict with international out pulsing code
20	Automatic Identified Outward Dialing (AIOD) - without AIOD, the

DIGITS	DESCRIPTION
	billing number for a PBX is the same as the PBX Directory Number (DN). With the AIOD feature, the originating line number within the PBX is provided for charging purposes. If the AIOD number is available when ANI is transmitted, code "00" is sent. If not, the PBX DN is sent with ANI code "20". In either case, the AIOD number is included in the AMA record.
23	Coin or Non-Coin - on calls using database access, <i>e.g.</i> , 800, ANI II 23 is used to indicate that the coin/non-coin status of the originating line cannot be positively distinguished for ANI purposes by the SSP. The ANI II pair 23 is substituted for the II pairs, which would otherwise indicate that the non-coin status is known, i.e., 00, or when there is ANI failure.
	ANI II 23 may be substituted for a valid 2-digit ANI pair on 0-800 calls. In all other cases, ANI II 23 should not be substituted for a valid 2-digit ANI II pair which is forward to an SSP from an EAEO.
	<ul> <li>Some of the situations in which the ANI II 23 may be sent:</li> <li>Calls from non-conforming end offices (CAMA or LAMA types) with combined coin/non-coin trunk groups.</li> <li>0-800 Calls</li> </ul>
	<ul><li>Type 1 Cellular Calls</li><li>Calls from PBX Trunks</li></ul>
	Calls from Centrex Tie Lines
24	Code 24 identifies a toll free service that has been translated to a Plain Old Telephone Service (POTS) routable number via the toll free database that originated for any non-pay station. If the received toll free number is not converted to a POTS number, the database returns the received ANI code along with the received toll free number. Thus, this 24 code indicates that this is a toll free service call since that fact can no longer be recognized simply by examining the called address.
25	Code 25 identifies a toll free service call that has been translated to a Plain Old Telephone Service (POTS) routable number via the toll free database that originated from any pay station, including inmate telephone service. Specifically, ANI II digits 27, 29 and 70 shall be replaced with Code 25.
27	Code 27 identifies a line connected to a pay station which uses network provided coin control signaling. II 27 is used to identify this type of pay station line irrespective of whether the pay station is provided by a Local Exchange Carrier (LEC) or a non-LEC. II 27 is transmitted from the originating end office on all calls made from these lines.
29	Code 29 is used to identify lines serving a confinement/detention facility that are intended for inmate/detainee use and require outward call screening ( <i>e.g.</i> , 0+ collect only service). As per Sect. 276 (d) of the Telecom Act, inmate telephone service is considered included in the general category of payphone service. Accordingly, lines identified with

DIGITS	DESCRIPTION
	ANI II 29 include both prison/inmate phones/payphones.
30-32	Intercept - where the capability is provided to route intercept calls (either directly or after an announcement recycle) to an access tandem with an associated Talc Operator Services System, the following ANI codes shall be used:
	30 Intercept (blank) - for calls to unassigned directory number (DN)
	31 Intercept (trouble) - for calls to directory numbers (DN) that have been manually placed in trouble-busy state by Talc personnel
	32 Intercept (regular) - for calls to recently changed or disconnected numbers
34	Talc Operator Handled Call - after the Talc Operator Services System has handled a call for an IC, it may change the standard ANI digits to "34," before out-pulsing the sequence to the IC, when the Telco performs all call handling functions, <i>e.g.</i> , billing. The code tells the IC that the BOC has performed billing on the call and the IC only has to complete the call.
40-49	Unrestricted Use - locally determined by carrier
52	Outward Wide Area Telecommunications Service (OUTWATS) - this service allows customers to make calls to a certain zone(s) or band(s) on a direct dialed basis for a flat monthly charge or for a charge based on accumulated usage. OUTWATS lines can dial station-to-station calls directly to points within the selected band(s) or zone(s). The LEC performs a screening function to determine the correct charging and routing for OUTWATS calls based on the customer's class of service and the service area of the call party. When these calls are routed to the interexchange carrier via a combined WATS-POTS trunk group, it is necessary to identify the WATS calls with the ANI code "52".
60	Telecommunications Relay Service (TRS) - ANI II digit pair 60 indicates that the associated call is a TRS call delivered to a transport carrier from a TRS Provider and that the call originated from an unrestricted line ( <i>i.e.</i> , a line for which there are no billing restrictions). Accordingly, if no request for alternate billing is made, the call shall be billed to the calling line.
61	Cellular/Wireless Personal Communications Service (PCS) (Type 1) - The "61" digit pair is to be forwarded to the interexchange carrier by the local exchange carrier for traffic originating from a cellular/wireless PCS carrier over type 1 trunks. (Note: ANI information accompanying digit pair "61" identifies only the originating cellular/wireless PCS system, not the mobile directory placing the call.)
62	Cellular/Wireless PCS (Type 2) - The "62" digit pair is to be forwarded to the interexchange carrier by the cellular/wireless PCS carrier when routing traffic over type 2 trunks through the local exchange carrier access tandem for delivery to the interexchange carrier. (Note: ANI information accompanying digit pair "62" identifies the mobile directory number placing the call but does not necessarily identify the true call point of origin.)
63	Cellular/Wireless PCS (Roaming) - The "63" digit pair is to be

DIGITS	DESCRIPTION
	forwarded to the interexchange carrier by the cellular/wireless PCS subscriber "roaming" in another cellular/wireless PCS network, over type 2 trunks through the local exchange carrier access tandem for delivery to the interexchange carrier. (Note: Use of "63" signifies that the "called number" is used only for network routing and should not be disclosed to the cellular/wireless PCS subscriber. Also, ANI information accompanying digit pair "63" identifies the mobile directory number forwarding the call but does not necessarily identify the true forwarded-call point of origin.)
66	TRS - ANI II digit pair 66 indicates that the associated call is a TRS call delivered to a transport carrier from a TRS Provider, and that the call originates from a hotel/motel. The transport carrier can use this indication, along with other information ( <i>e.g.</i> , whether the call was dialed 1+ or 0+) to determine the appropriate billing arrangement ( <i>i.e.</i> , bill to room or alternate bill).
67	TRS - ANI II digit pair 67 indicates that the associated call is a TRS call delivered to a transport carrier from a TRS Provider and that the call originated from a restricted line. Accordingly, sent paid calls should not be allowed and additional screening, if available, should be performed to determine the specific restrictions and type of alternate billing permitted.
70	Code 70 identifies a line connected to a pay station (including both coin and coinless stations) which does not use network provided coin control signaling. II 70 is used to identify this type pay station line irrespective of whether the pay station is provided by a LEC or a non-LEC. II 70 is transmitted from the originating end office on all calls made from these lines.
80-89	Reserved for Future Expansion "to" 3-digit Code
93	Access for private virtual network types of service: the ANI code "93" indicates, to the IC, that the originating call is a private virtual network type of service call.
95	Unassigned - conflict with Test Codes 958 and 959

**AOCN**. Administrative Operating Company Number. Also refers to the company that updates Traffic Routing Administration (TRA) databases under contract to a code holder.

Carrier Identification Codes. A CIC is a 4-digit numeric code primarily used to uniquely identify an access customer who has purchased access such as Feature Group B (FGB) and/or Feature Group D (FGD) access services. These types of CICs are primarily used for routing from a local network to the access purchaser and for billing between the local network and the access purchaser. In addition, as the result of a 2002 directive to NANPA from the FCC, switchless resellers may also be assigned CICs without the requirement to first purchase direct FG D truck access. Also, pursuant to agreement reached by the Industry Numbering Committee (INC) in 2006, Billing and Collection Clearinghouses that provide

third-party bill aggregation services on behalf of access purchasers may also be assigned CICs as identifiers only when the use of an ABEC (Alternate Billing Entity Code) is not technically feasible.

**Auditor**. Neutral Fourth Party vendor selected to audit the telephone number administration and assignment functions for the telephony industry in the United States and all North American Numbering Plan (NANP) Administrators, including the Pooling administrator.

**Bidder.** The company submitting a bid response to this RFP.

**Billing and Collection Agent.** The designated vendor responsible for managing NANPA financial arrangements and payments between the industry and the NANP Administration vendor.

**Code Holder.** The code holder is the Local Exchange Routing Guide (LERG) assignee of the Numbering Plan Area (NPA)-NXX.

**Contractor.** The winning bidder for NANPA.

**Easily Recognizable Codes.** When the second and third digits of an area code are the same, that code is called an easily recognizable code (ERC). ERCs designate special services; *e.g.*, 888 for toll-free service.

**Enterprise Services.** Functions performed by the Administrator that are outside of the requirements and responsibilities detailed within this proposal and associated industry guidelines and regulatory orders.

**Feature Group B.** Provides trunk side access to telephone company end office switches with an associated uniform 950-XXXX access code for an InterExchange Carrier's use in originating and terminating communications.

**Feature Group D.** Provides trunk side access to telephone company end office switches with an associated 101XXXX access code for an InterExchange Carrier's use in originating or terminating communications; no access code is required for calls to an InterExchange Carrier over Feature Group D switched access service if the end-user's telephone number is subscribed to that InterExchange Carrier.

**FCC Registration Number (FRN).** The FRN is a unique 10-digit number that is assigned to an entity that does business with the Federal Communications Commission.

**Knowledge Base.** A database provided on a Support Web Site programmed with application-specific, self-help information that is constantly being improved, added-to, and updated based on information gathered from use of the Application.

**INC.** The Industry Numbering Committee (INC) is an industry forum operating under the auspices of the Alliance for Telecommunications Industry Solutions (ATIS). Their mission is to provide an open forum to address and resolve industry-wide issues associated with the planning, administration, allocation, assignment and use of numbering resources and related dialing considerations for public telecommunications within the NANP area.

International Telecommunication Union (ITU) Study Group. There are 15 ITU study groups that focus on a variety of topics. See: <a href="http://www.itu.int/ITU-T/studygroups/">http://www.itu.int/ITU-T/studygroups/</a>

**NCS Pearson.** NCS Pearson is a global provider of applications, services, and technologies for education, testing, assessment, government and complex data management. See: <a href="http://www.ncspearson.com/">http://www.ncspearson.com/</a>

**N11 Codes.** Service codes, commonly called N11 codes because of their format, are used to provide three-digit dialing access special services. In the United States, the Federal Communications Commission (FCC) administers N11 codes, and recognizes only 211, 311, 511, 711, 811 and 911 as nationally assigned.

211	Community Information and Referral Services
311	Non-emergency Police and Other Governmental
	Services (U.S.)
411	Local Directory Assistance
511	Traffic and Transportation Information (U.S.)
611	Repair Service
711	Telecommunications Relay Service (TRS)
811	Access to One Call Services to Protect Pipeline and Utilities from Excavation Damage (US); Non-Urgent Health Teletriage Services (Canada)
911	Emergency

**North American Numbering Council (NANC).** The NANC is a Federal Advisory Committee established pursuant to the United States Federal Advisory Committee Act, 5 U.S.C., App. 2 (1988) (FACA). The NANC was established to advise the FCC and other NANP member countries on issues related to NANP Administration, and to advise the Commission on local number portability administration issues in the United States. The

NANC also develops policy recommendations on numbering issues, initially resolves disputes and provides guidance to the Pooling Administrator (PA) as well as the NANPA. The NANC's Charter under the FACA provides that, in carrying out its responsibilities, the NANC shall assure that all NANP administrators support the following policy objectives:

- That the NANP facilitates entry into the communications marketplace by making numbering resources available on an efficient, timely basis to communications service providers;
- That the NANP does not unduly favor or disfavor any particular industry segment or group of consumers;
- That the NANP does not unduly favor one technology over another;
- That the NANP gives consumers easy access to the public switched telephone network; and
- That the NANP ensures that the interests of all NANP member countries are addressed fairly and efficiently, fostering continued integration of the NANP across NANP member countries.

**NANP.** The NANP is the basic numbering scheme for the Public Switched Telephone Networks (PSTNs) in the following 19 countries (formerly known as World Zone 1): Anguilla, Antigua & Barbuda, Bahamas, Barbados, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago, Turks & Caicos Islands, and the United States (including Puerto Rico, the U.S. Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands and American Samoa). The format of the NANP is in compliance with ITU standards as detailed in Recommendation E.164.

**NXX.** The format of an NPA code or a central office code (N=2-9, X=0-9)

**Ported Telephone Numbers.** This refers to the ability to maintain a subscriber's Telephone Number (TN) while changing vendors.

Rate Area. Identifies the geographic area used to distinguish rating and billing boundaries.

**Term of Administration.** Shall be the period of time for which these requirements shall apply. At any time prior to the termination of the initial or subsequent Term of Administration, the Term of Administration may be renewed up to five years in length with the approval of the NANPA vendor and the appropriate regulatory authorities.

**Query.** The ability to request and retrieve data stored in the NANP Administration System **Respondent.** The company submitting a bid response to this RFP.

**Subcontractor.** One not in the employment of the contractor, who is performing designated services and functions contained within this document.

**U.S. Department of State Study Group A.** Study Group A advises the State Department, through the United States Telecommunications Advisory Committee, on issues related to U.S. policy, standardization, regulatory, and competitive aspects of the operations and tariffs of telecommunications services.

**User(s).** The code applicants, code holders, regulatory organizations, and the general public that shall interface with NANPA on all the functions and applications contained with this document.

**Vertical Service Codes.** Vertical service codes (Viscous) are customer-dialed codes that provide customer access to features and services provided by local exchange carriers, interexchange carriers, Commercial Mobile Radio Service (CMRS), etc. Services include call forwarding, automatic callback, customer originated trace, and many others. The format of a Vertical Service Code (VSC) is \*XX or \*2XX (touch-tone) and 11XX or 112XX (rotary). For example, call forwarding is activated by dialing \*72 or 1172.

# Appendix B

## **Interface Contact Information**

# **Current North American Numbering Plan Administrator (NANPA) Vendor**

Neustar

John C. Manning NANPA Director 46000 Center Oak Plaza Sterling, VA 20166

Telephone: 571-434-5770

#### **Pooling Administrator**

Neustar

Amy Putnam
Director - Thousand Block Pooling Administration
1800 Sutter St., Suite 780
Concord, CA 94520

Phone: 866-neu-pool (866-638-7665)

#### **Number Portability Administration Center**

#### Neustar

46000 Center Oak Plaza Sterling, VA 20166

Telephone: 1-888 NPAC HELP

## **Local Exchange Routing Guide (LERG)**

**Telcordia Technologies** 

Traffic Routing Administration One Telcordia Drive, Room 4A738 Piscataway, NJ 08854-41567

Telephone: 732-699-6700

# Mobile Block Identifier (MBI) Administration Vangent, Inc.

3833 Greenway Drive Lawrence, KS 66046 Telephone: 785-331-2323

Linda Link MBI Administration Account Management Telephone: 952-831-9663

Mitch Kaufman MBI Administration Account Management Telephone: 703-435-8255

Contact information is included to facilitate responses to this document by potential bidders and is not intended to endorse the particular organizations listed.

# **Appendix C**

# **Index to the Binder of Decisional Principles**

A Compilation of Numbering Rules, Orders, and Industry Agreements

Date of Last Update May 24, 2010

## **Table of Contents**

Page	Tab
FCC Documents	3
CICs	3
Local Competition	4
N11 Codes	5
NRO/State Orders	6
Number Resource Optimization	9
Local Number Portability	13
NANP Administration	14
Canadian Numbering Documents	15
ATIS Sponsored Committees	15
ATIS Sponsored Committee Documents	16
INC Documents	16
Other ATIS Sponsored Committee Documents	17
ITU Numbering Documents	17
LNPA Working Documents	17
Telecommunications Industry Association (TIA) Documents	17

FCC Numbering Documents

Topic	Release	Adopted	Caption	Action
CICs	FCC 97- 125	4-7-97	In the Matter of Administration Of The North American Numbering Plan Carrier Identification Codes (CICs); Petition for Rulemaking of VarTec Telecom., Inc.	Second Report And Order
CICs	FCC 97- 364	10-09-97	Administration of the North American Numbering Plan Carrier Identification Codes	Further Notice of Proposed Rulemaking and Order
CICs	DA 97- 1524	7-18-97	In the Matter of Administration of the North American Numbering Plan Carrier Identification Codes (CICs)	Order On Reconsideration, Order On Application For Review, And Second Further Notice Of Proposed Rulemaking
CICs	FCC 97-	10-22-97	In the Matter of Administration of the North American Numbering Plan, Carrier Identification Codes (CICs)	Order On Reconsideration, Order On Application For Review, And Second Further Notice Of Proposed Rulemaking
CICs	DA 97- 2439	11-20-97	In the Matter of Administration of the North American Numbering Plan Carrier Identification Codes (CICs)	Order
CICs	DA 98- 412	3-3-98	North American Numbering Council Presents Report And Recommendations Concerning Use And Assignment Of Carrier Identification Codes (CICs) (CC Docket No. 92-237)	Public Notice
CICs	DA 98- 828	5-1-98	In the Matter of Administration of the North American Numbering Plan Carrier Identification Codes (CICs)	Declaratory Ruling
CICs	FCC 00- 255	7-21-00	In the Matter of Implementation of the Subscriber Carrier Selection Changes Provisions of the Telecommunications Act of 1996, Policies and Rules Concerning Unauthorized Changes of Consumers Long Distance Carriers	Third Report and Order and Second Order on Reconsideration
CICs	DA 01- 1519	6-26-01	Common Carrier Bureau Directs The NANPA To Make Available For Assignment Additional Feature Group D Carrier Identification Codes	Public Notice

Topic	Release	Adopted	Caption	Action
CICs	DA 03-	8-28-03	American Telnet Request for Declaratory Ruling and	Order
	2765		Waiver	
CICs	None	4-20-05	4-20-05   Time Warner Cable Information Services Request for a	Letter
			Carrier Identification Code	

Topic	Release	Adopted	Caption	Action
Local	FCC 99-	4-19-96	In The Matter Of Implementation Of The Local	Notice Of Proposed Rulemaking
Competition	227		Competition Provisions In The Telecommunications Act Of 1996	
Local	FCC 99-	8-1-96	In The Matter Of Implementation Of The Local	First Report And Order
Competition	170		Competition Provisions In The Telecommunications Act Of	
			1996; Interconnection Between Local Exchange Carriers	
			And Commercial Mobile Radio Service Providers	
Local	FCC 96-	96-8-8	In The Matter Of Implementation Of The Local	Second Report And Order And
Competition	333		Competition Provisions Of The Telecommunications Act Of   Memorandum Opinion And Order	Memorandum Opinion And Order
			1996; Interconnection Between Local Exchange Carriers	
			And Commercial Mobile Radio Service Providers; Area	
			Code Relief Plan For Dallas And Houston. Ordered By The	
			Public Utility Commission Of Texas; Administration Of	
			The North American Numbering Plan; Proposed 708 Relief	
			Plan And 630 Numbering Plan Area Code By Ameritech-	
			Illinois	
Local	FCC 99-	8-23-99	In The Matters Of Implementation Of The	Third Report And Order In CC
Competition	227		Telecommunications Act Of 1996: Telecommunications	Docket No. 96-115, Second Order
			Carriers' Use Of Customer Proprietary Network Information	On Reconsideration Of The Second
			And Other Customer Information; Implementation Of The	Report And Order In CC Docket
			Local Competition Provisions Of The Telecommunications	No. 96-98, And Notice Of Proposed
			Act Of 1996; Provision Of Directory Listing Information	Rulemaking In 99-273
			Under The Telecommunications Act Of 1934, As Amended	
Local	FCC 99-	7-12-99	In The Matters Of Implementation Of The Local	First Order On Reconsideration
Competition	170		Competition Provisions Of The Telecommunications Act Of	

Topic	Release	Adopted	Caption	Action
			1996; Interconnection Between Local Exchange Carriers	
			And Commercial Mobile Radio Service Providers; Area	
			Code Relief Plan For Dallas And Houston, Ordered By The	
			Public Utility Commission Of Texas; Administration Of	
			The North American Numbering Plan; Proposed 708 Relief	
			Plan And 630 Numbering Plan Area Code By Ameritech-	
			Illinois	
Local	FCC 99-	9-13-99	-99 In The Matters Of Implementation Of The Local Third Order On Reconsideration Of	Third Order On Reconsideration Of
Competition	243		Competition Provisions Of The Telecommunications Act Of	Second Report And Order And
			1996; Interconnection Between Local Exchange Carriers	Memorandum Opinion And Order
			And Commercial Mobile Radio Service Providers; Area	
			Code Relief Plan For Dallas And Houston, Ordered By The	
			Public Utility Commission Of Texas; Administration Of	
			The North American Numbering Plan; Proposed 708 Relief	
			Plan And 630 Numbering Plan Area Code By Ameritech-	
			Illinois; Petition For Declaratory Ruling Regarding Area	
			Code Relief Plan For Area Codes 508 And 617, Filed By	
			The Massachusetts Department Of Public Utilities; New	
			York Department Of Public Service Petition For Expedited	
			Waiver Of 47 C.F.R. Section 52.19(C)(3)(Ii)	

Topic	Release Adopted	Adopted	Caption	Action
N11	FCC 92-	5-4-92	5-4-92 In The Matter Of The Use Of N11 Codes And Other	Notice Of Proposed Rulemaking
Codes	203		203 Abbreviated Dialing Arrangements	
N11	FCC 97-51	2-18-97	In The Matter Of The Use Of N11 Codes And Other	First Report And Order And Further
Codes			Abbreviated Dialing Arrangements	Notice Of Proposed Rulemaking
N11	FCC 00-	7-21-00	7-21-00   In The Matter Of The Use Of N11 Codes And Other	Second Report And Order
Codes	257		Abbreviated Dialing Arrangements	
N11	FCC 00-	7-21-00 In T	In The Matter Of Petition By The United States Department   Third Report And Order And Order	Third Report And Order And Order
Codes	256		Of Transportation For Assignment Of An Abbreviated	On Reconsideration

Topic	Release	Adopted	Caption	Action
			Dialing Code (N11) To Access Intelligent Transportation System (Its) Services Nationwide; Request By The Alliance Of Information And Referral Systems, United Way Of America, United Way 211 (Atlanta, Georgia), United Way Of Connecticut, Florida Alliance Of Information And Referral Services, Inc., And Texas I&R Network For Assignment Of 211 Dialing Code; The Use Of N11 Codes And Other Abbreviated Dialing Arrangements	
N11	FCC 00-	8-24-00	In The Matter Of Implementation Of 911 Act; The Use Of	Fourth Report And Order And
Codes	327		N11 Codes And Other Abbreviated Dialing Arrangements	Third Notice Of Proposed
				Rulemaking CC Docket No. 92-105
				Notice Of Proposed Rulemaking
				Wt Docket No. 00-110
N11	FCC 01-	12-21-01	12-21-01 In the matter of Provision of Directory Listing Information	Notice of Proposed Rulemaking
Codes	384		Under the Communications Act of 1934, As Amended; The	
			use of N11 Codes and Other Abbreviated Dialing	
			Arrangements; Administration of the North American	
			Numbering Plan	
N11	FCC 05-59	3-10-05		Report and Order
Codes			Abbreviated Dialing Arrangements	

Topic	Release	Adopted	Caption	Action
NRO/State	FCC 98-	9-11-98	In The Matter Of Petition For Declaratory Ruling And	Memorandum Opinion And
Orders	224		Request For Expedited Action On The July 15, 1997 Order	Order And Order On
			Of The Pennsylvania Public Utility Commission Regarding	Keconsideration
			Area Codes 412, 610, 215, And /1/; Implementation Of the	["Fennsylvania Order"]
			Act Of 1996	
NRO/State	FCC 99-	9-15-99	In The Matter Of California Public Utilities Commission	Order
Orders	248		Petition For Delegation Of Additional Authority Pertaining	
			To Area Code Relief And NXX Code Conservation	
			Measures	
NRO/State	FCC 99-	9-15-99	In The Matter Of Florida Public Service Commission	Order
Orders	249		Petition To Federal Communications Commission For	
			Expedited Decision For Grant Of Authority To Implement	
			Number Conservation Measures	
NRO/State	FCC 99-	6-12-6	In The Matter Of Massachusetts Department Of	Order
Orders	246		Telecommunications And Energy's Petition For Waiver Of	
			Section 52.19 To Implement Various Area Code	
			Conservation Methods In The 508, 617, 781, And 978 Area	
			Codes	
NRO/State	FCC 99-	6-12-6	In The Matter Of New York State Department Of Public	Order
Orders	247		Service Petition For Additional Delegated Authority To	
			Implement Number Conservation Measures	
NRO/State	FCC 99-	6-58-6	In The Matter Of Maine Public Utilities Commission	Order
Orders	260		Petition For Additional Delegated Authority To Implement	
			Number Conservation Measures	
NRO/State	DA 99-	11-30-99	In The Matter Of Petition Of The Ohio Public Utilities	Order
Orders	2635		Commission For Delegation Of Additional Authority To	
			Implement Number Conservation Measures	
NRO/State	DA 99-	11-30-99	In The Matter Of Petition Of The Public Utility Commission	Order
Orders	2636		Of Texas For Expedited Decision For Authority To	

Topic	Release	Adopted	Caption	Action
			Implement Number Conservation Measures	
NRO/State Orders	DA 99- 2633	11-30-99	In The Matter Of Connecticut Department Of Public Utility Control's Petition For Delegation Of Additional Authority To Implement Area Code Conservation Measures	Order
NRO/State Orders	DA 99- 2637	11-30-99	ce Additional n Measures	Order
NRO/State Orders	DA 99- 2634	11-30-99	3 K	Order
NRO/State Orders	DA 01- 2013A1	8-23-01	In the Matter of Numbering Resource Optimization Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 Connecticut Department of Public Utility Control Expedited Petition for Additional Authority Michigan Public Service Commission Petition for Additional Delegated Authority to Implement Number Conservation Measures Petition of the North Carolina Utilities Commission for Additional Delegated Authority to Implement Number Optimization Measures	Order
NRO/State Orders	FCC 03-	5-16-03	In the Matter of the Connecticut Department of Public Utility Commission for Delegated Authority to Implement specialized Transitional Overlay	Memorandum Opinion & Order
NRO/State Orders	FCC 03- 196	8-5-03	In the Matter of Petition of California Public Utilities Commission for Waiver of the federal Communications Commission's Contamination Threshold Rule	Order
NRO/State Orders	FCC 06-	2-17-06	In the Matter of Numbering Resource Optimization	Order

Topic	Release	Adopted	Caption	
			Vest Virgir vion for Au vation Mes lebraska Pr sion for Au vation Mes Nklahoma C sion for Au vation for Au vation Mes fichigan P gated Auth easures fissouri Pu gated Auth easures	
NRO/State Orders	DA 06- 2299	11-9-06	In the Matter of Numbering Resource Optimization Petition for Delegated Authority by the Public Utilities Commission of Ohio Petition of the New York State Department of Public Service for Mandatory Pooling Petition of the Washington Utilities and Transportation Commission for Mandatory Number Pooling New Mexico Public Regulation commissions' Petition for Delegated Authority to Implement Additional Number Conservation Measures	
NRO/State Orders	DA 07- 2280	5-31-07	In the Matter of Numbering Resource Optimization Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 Petition of the Kentucky Public Service Commission for Additional Delegated Authority to Implement Number	

Topic	Release	Adopted	Caption	Action
			Conservation Measures	
NRO/State Orders	DA 07- 3728	8-24-07	of the ation for ation asin for	Order
NRO/State Orders		10-28-08	Amendment to the New Jersey Administrative Code (N.J.A.C.), Title 14. Public Utilities, Chapter 10, Telecommunications, Subchapter 3, Number Reclamation (N.J.A.C. 14:10-3.2)	Amendment
NRO/State Orders	DA 10- 883	5-18-10	In the Matter of Numbering Resource Optimization Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 Petition of the Indiana Utility Regulatory Commission for Delegated Authority to Implement Additional Number Conservation Measures Petition of the Mississippi Public Service Commission for Delegated Authority to Implement Number Conservation Measures Petition of the Pennsylvania Public Utility Commission for Delegated Authority to Implement Number Conservation Measures Petition of the Regulatory Commission of Alaska for Delegated Authority to Implement Number Conservation Measures Measures	Order

Topic	Release	Adopted	Caption	Action
Topic	Release	Adopted	Caption	Action
Number Resource Optimization	DA 98- 2265	11-6-98	Common Carrier Bureau Seeks Comment On North American Numbering Council Report Concerning Telephone Number Pooling And Other Optimization Measures	Public Notice
Number Resource Optimization	FCC 99-	5-27-99	In The Matter Of Numbering Resource Optimization; Connecticut Department Of Public Utility Control Petition For Rulemaking To Amend The Commission's Rule Prohibiting Technology-Specific Or Service-Specific Area Code Overlays; Massachusetts Department Of Telecommunications And Energy Petition For Waiver To Implement A Technology-Specific Overlay In The 508, 617, 781, And 978 Area Codes; California Public Utilities Commission And The People Of The State Of California Petition For Waiver To Implement A Technology-Specific Or Service-Specific Area Code	Notice Of Proposed Rulemaking
Number Resource Optimization	FCC 00- 104	3-17-00	In The Matter Of Numbering Resource Optimization	Report And Order And Further Notice Of Proposed Rule Making
Number Resource Optimization	DA 00- 1549	7-11-00	Common Carrier Bureau Responses To Questions In The Numbering Resource Optimization Proceeding	Public Notice
Number Resource Optimization	DA 00- 1616	7-20-00	In The Matter Of Numbering Resource Optimization Implementation Of The Local Competition Provisions Of The Telecommunications Act Of 1996 Petition Of The Arizona Corporation Commission For Delegated Authority To Implement Number Conservation Measures Petition Of The Colorado Public Utilities Commission For Additional Delegated Authority To Implement Number	Order

Topic R.	Release	Adopted	Caption Action	
			Resource Optimization Measures	
			Petition Of The Georgia Public Service Commission For	
			Additional Delegated Authority To Implement Number	
			Conservation Measures	
			Indiana Regulatory Commission Petition For Additional	
			Delegated Authority To Implement Number Conservation	
			Measures	
			Iowa Utilities Board Petition For Delegation Of Additional	
			Authority And Request For Limited Waiver	
			Public Service Commission Of Kentucky's Petition For	
			Additional Delegated Authority To Implement Number	
			Conservation Measures Missouri Public Service	
			Commission Petition For Additional Delegated Authority	
			To Implement Number Conservation Measures In The 314,	
			417, 573, 636, 660 And 816 Area Codes	
			Nebraska Public Service Commission Petition For	
			Delegation Of Additional Authority To Implement Area	
			Code Conservation Methods In The 402 Area Code	
			North Carolina Utilities Commission Petition For	
			Additional Delegated Authority To Implement Number	
			Optimization Measures	
			Petition Of The Oregon Public Utility Commission For	
			Expedited Decision For Authority To Implement Number	
			Conservation Measures Petition Of The Pennsylvania	
			Public Utility Commission For Delegated Authority To	
			Implement Number Conservation Measures	
			Petition Of The Tennessee Regulatory Authority For	
			Additional Delegated Authority To Implement Numbering	
			Conservation Methods Petition Of The Utah Public Service	
			Commission For Accelerated Grant Of Authority To	
			Implement Number Conservation Measures	

Topic	Release	Adopted	Caption	Action
			Petition Of The Virginia State Corporation Commission For Expedited Decision On Delegation Of Authority To Implement Number Conservation Measures Washington Utilities And Transportation Commission's Amended Petition For Additional Delegated Authority To Implement Number Conservation Measures	
Number Resource Optimization	FCC 00- 280	7-31-00	In The Matter Of Numbering Resource Optimization	Order
Number Resource Optimization	FCC 00- 429	12-7-00	In The Matter Of Numbering Resource Optimization; Petition For Declaratory Ruling And Request For Expedited Action On The July 15, 1997 Order Of The Pennsylvania Public Utility Commission Regarding Area Codes 412, 610, 215, And 717	Second Report And Order, Order On Reconsideration In CC Docket No. 96-98 And CC Docket No. 99- 200, And Second Further Notice Of Proposed Rulemaking In CC Docket No. 99-200
Number Resource Optimization	DA 01- 386	2-13-01	In The Matter Of Numbering Resource Optimization Implementation Of The Local Competition Provisions Of The Telecommunications Act Of 1996 Petition Of The Louisiana Public Service Commission For Expedited Decision For Additional Delegated Authority To Implement Numbering Conservation Measures Petition Of The Maryland Public Service Commission For Additional Delegated Authority To Implement Number Conservation Measures Massachusetts Department Of Telecommunications And Energy Petition For Delegation Of Additional Authority To Implement Number Conservation Measures In Massachusetts New Jersey Board Of Public Utilities Petition For Delegated Authority To Implement Number Conservation Measures	Order
Number Resource Optimization	[None]	3-13-01	FCC Releases Numbering Resource Utilization Report; Report Shows That Number Optimization Measures Adopted By The FCC Are Improving Phone Number Usage	News

Topic	Release	Adopted	Caption	Action
			Efficiency	
Number Resource Optimization	DA 01- 656	3-13-01	tter Of Numbering Resource Optimization ation Of The Local Competition Provisions Of Demanderions Act Of 1996 lility Regulatory Commission's Petition For Delegated Authority To Implement Number on Measures Indiana Utility Regulatory on's Request For Expedited Ruling And Second at To Petition For Additional Delegated Authority tent Number Conservation Measures Public Utilities Commission Petition For Delegated Authority To Implement Number on Measures ublic Service Commission's Petition For Of Authority To Implement Number Pooling In rea Code if The Oklahoma Corporation Commission For Decision For Delegation Of Authority To Number Conservation Measures on Measures Vermont Public Service Board's or Additional Delegated Authority To Implement Onservation Measures The Public Service Commission Of West or Additional Delegated Authority To Implement onservation Measures	Order
Number Resource Optimization	FCC 00-	8-31-01	In The Matter Of Numbering Resource Optimization	Order
Number Resource	FCC 01-	12-12-01	In the Matter of Numbering Resource Optimization Implementation of the Local Competition Provisions of the	Third Report and Order and Second Order on Reconsideration

Topic	Release	Adopted	Caption	Action
Optimization			Telecommunications Act of 1996 Telephone Number Portability	
Number Resource Optimization	DA 01- 3025	12-12-10	In the Matter of Numbering Resource Optimization Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 Petition of Representative Keith R. McCall and Members of the Northeast Delegation of the Pennsylvania House of Representatives Requesting that Additional Authority be Delegated to the Pennsylvania Public Utility Commission to Implement Additional Number Conservation Measures Petition of the Louisiana Public Service Commission for Expedited Decision for Additional Delegated Authority to Implement Number conservation Measures regarding 318	Order
Number Resource Optimization	FCC 02-	3-13-02	In the Matter of Numbering Resource Optimization Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 Telephone Number Portability	Third Order on Reconsideration in CC Docket No. 99-200, Third Further Notice of Proposed Rulemaking in CC Docket 99-200, and Second Further Notice of Proposed Rulemaking in CC Docket No. 95-116
Number Resource Optimization	DA 02- 948	4-24-02	In the Matter of Numbering Resource Optimization	Order
Number Resource Optimization	FCC 03-		In the Matter of Petition of the Connecticut Department of Public Utility Control for Delegated Authority to Implement Specialized Transitional Overlays	Memorandum Opinion and Order
Number Resource Optimization	FCC 03-	5-28-03	In the Matter of Numbering Resource Optimization Implementation of the Local Competition Provisions of the Telecommunications Act of 1996	Fourth Report and Order in CC Docket No. 99-200 and CC Docket No. 95-116, and Fourth Further

Topic	Release	Adopted	Caption	Action
			Telephone Number Portability	Notice of Proposed Rulemaking in CC Docket No. 99-200
Number Resource Optimization	FCC 03- 140	6-19-03	In the Matter of Numbering Resource Optimization Petition for Forbearance from Further Increases in the Numbering Utilization Threshold	Memorandum Opinion and Order
Number Resource Optimization	FCC 03- 196	8-5-03	In the Matter of Numbering Resource Optimization Petition of the California Public Utilities commission for Waiver of the Federal Communications Commission's Contamination Threshold Rule	Order
Number Resource Optimization	FCC 05- 20	1-28-05	In the Matter of Administration of the North American Numbering Plan	Order
Number Resource Optimization	DA 05- 2439	8-24-05	In the Matter of Petition of the California Public Utilities Commission for Delegated Authority to Implement Specialized Transitional Overlays	Order
Number Resource Optimization	FCC 07- 188	10-31-07	In the Matters of Telephone Number Requirements for IP-Enabled Services Providers Local Number Portability Porting Interval and Validation Requirements IP-Enabled Services Telephone Number Portability CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues Final Regulatory Flexibility Analysis Numbering Resource Optimization	Report and Order, Declaratory Ruling, Order on Remand
Number Resource Optimization	DA 09- 2389	11-5-09	In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities E911 Requirements for IP-Enabled Service	Order

Providers Providers	Topic	Release	Adopted	Caption	ction
				Providers	

Topic	Release	Release Adopted	Caption	tion
Local	FCC 96-	7-2-96	7-2-96   In The Matter Of Telephone Number Portability   First	First Report and Order and Further
Number	286		Notic	Notice of Proposed Rulemaking
Portability				
Local	FCC 97-	3-6-97	3-6-97 In The Matter Of Telephone Number Portability	First Memorandum Opinion and
Number	74		Orde	Order on Reconsideration
Portability				
Local	FCC 97-	8-14-97	8-14-97   In The Matter Of Telephone Number Portability   Secon	Second Report and Order
Number	289			
Portability				

Topic	Release	Adopte	Caption	Action
NANP Administration	FCC 95- 019	1-12- 95	In the Matter of Proposed 708 Relief Plan and 630 Numbering Declaratory Ruling and Order Plan Area Code by Ameritech – Illinois	Declaratory Ruling and Order
NANP Administration	FCC 95- 283	7-13- 95	the North American	Report and Order
NANP Administration	FCC 97- 372	10-9-	In The Matter Of The Administration of the North American Numbering Plan / Toll Free Service Access Codes	Third Report and Order
NANP Administration	DA 01- 1210	5-14-		Letter
NANP Administration	DA 04- 1721	6-16-	6-16- In The Matter Of The Administration of the North American 04 Numbering Plan	Order

#### **Canadian Numbering Documents:**

In Canada, telecommunications is governed by the Telecommunications Act. The Canadian Radio-television & Telecommunications Commission (CRTC) regulates all telecommunications in Canada under this Act. The CRTC has established the CRTC Industry Steering Committee (CISC) to address telecommunications issues in Canada. The Canadian Steering Committee on Numbering (CSCN) is a subtending committee of the CISC. The role of the CSCN is to establish numbering administration guidelines that apply in Canada.

The major numbering administration guidelines that apply in Canada include but are not limited to:

Canadian Central Office Code (NXX) Assignment Guidelines

Canadian NPA Relief Planning Guidelines

Canadian Adjunct to INC NPA Allocation Plan and Assignment Guidelines

Canadian Numbering Resource Utilization Forecast Guidelines

Canadian Adjunct to INC Carrier Identification Code (CIC) Assignment Guidelines

Canadian Adjunct to INC International Inbound NPA (INT/NPA/NXX) Assignment Guidelines

Canadian Adjunct to INC Personal Communications Services (PCS) 5YY NXX Code **Assignment Guidelines** 

Canadian Adjunct to INC 800-855 Number Assignment Guidelines

Canadian Adjunct to INC 555 NXX Assignment Guidelines

Canadian Adjunct to INC 900 NXX Code Assignment Guidelines

Canadian NPA 600 NXX Code Assignment Guidelines

CSCN Guidelines for Vertical Service Codes

Canadian MIN Block Identifier (MBI) Assignment Guidelines

Emergency Service Routing Digit (ESRD) Block Assignment Guidelines

Canadian International Mobile Station Identity (IMSI) Assignment Guidelines

Canadian System Identifier (SID) Assignment Guidelines

Canadian N11 Notification & Implementation Guidelines

The current versions of the numbering administration guidelines applicable in Canada may be obtained from the Canadian Numbering Administrator website at: www.cnac.ca.

The Canadian Numbering Administrator contact is;

Glenn Pilley Director - Canadian Numbering Administrator SAIC Canada 1516-60 Queen Street Ottawa, Ontario Canada K1P 5Y7 Phone 613-563-7242 Fax 613-563- 9293

Email: pilleyg@saiccanada.com

There are various Decisions and Orders that affect numbering administration in Canada. These Decisions and Orders may be obtained form the CRTC website at: www.crtc.gc.ca.

### **ATIS Sponsored Committees and Programs**

Administration Council for Terminal Attachments (ACTA)				
Automatic Identification and Data Capture Committee (AIDC)				
Emergency Services Interconnection Forum (ESIF)				
Home Networking Forum (HNET)				
IPTV Interoperability (IIF)				
Industry Numbering Committee (INC)				
IMSI Oversight Council (IOC)				
Interactive Voice Response (IVR) Forum				
Next Generation Interconnection Interoperability Forum (NGIIF)				
Network Interface, Power and Protection Committee (NIPP)				
Network Reliability Steering Committee (NRSC)				
Committee O5 - Wood Poles				
Ordering and Billing Forum (OBF)				
Optical Transport and Synchronization Committee (OPTXS)				
Packet Technologies and Systems Committee (PTSC)				
Network Performance, Reliability and Quality of Service Committee				
(PRQC)				
Protection Engineers Group (PEG)				
Service Oriented Network Forum (SON)				
Telecommunications Fraud Prevention Committee (TFPC)				
Telecom Management and Operations Committee (TMOC)				
Wireless Technologies and Systems Committee (WTSC)				

### **ATIS Sponsored Committee Documents - INC Documents**

The latest copies of these documents may be downloaded from the ATIS website at <a href="http://www.atis.org/inc/incguides.asp">http://www.atis.org/inc/incguides.asp</a>

Doc Number	Title
ATIS-0300047	800-855 Number Assignment Guidelines
ATIS-0300048	555 NXX Assignment Guidelines and Forms
ATIS-0300049	International Inbound NPA (INT/NPA/NXX) Assignment
	Guidelines
ATIS-0300050	Carrier Identification Code (CIC) Assignment Guidelines
ATIS-0300051	Central Office Code (NXX) Assignment Guidelines, with
	Appendices and Forms
ATIS-0300052	Personal Communication Services (PCS) 5YY NXX Code
	Assignment Guidelines

ATIS-0300053	Report on Personal Communications Services (PCS) N00 Portability
ATIS-0300054	Procedures for Change in E.164 Country Code Assignments
ATIS-0300055	NPA Allocation Plan & Assignment Guidelines
ATIS-0300055	Report on Number Portability
ATIS-0300057	
	Toll Free Resource Exhaust Relief Planning Guidelines
ATIS-0300058	Vertical Service Code (VSC) Assignment Guideline
ATIS-0300059	Uniform Dialing Plan
ATIS-0300060	9YY NXX Code Assignment Guidelines
ATIS-0300061	NPA Code Relief Planning and Notification Guidelines
ATIS-0300062	500/900 Report on LEC Number Portability
ATIS-0300063	Initial Report to the NANC on Number Pooling (Version 2)
ATIS-0300064	Automatic Number Identification (ANI) Information Digit Codes
ATIS-0300065	Location Routing Number Assignment Practices
ATIS-0300066	Thousands-Block Number (NXX-X) Pooling Administration
	Guidelines
ATIS-0300067	Interim NANP Expansion Report
ATIS-0300068	North American Numbering Plan Resource Utilization/Forecast
	Reporting (NRUF) Guidelines
ATIS-0300069	Report on Unassigned Number Porting (UNP)
ATIS-0300070	Guidelines for the Administration of Telephone Numbers
ATIS-0300071	Recommended Plan for Expanding the Capacity of the North
	American Numbering Plan (NANP)
ATIS-0300072	North American Numbering Plan (NANP) Expansion Reference
	Document
ATIS-0300073	D Digit Report
ATIS-0300076	Numbering and Dialing Plan for the United States
ATIS-0300093	Numbering for Internet-Based Relay Services Report

For all other ATIS Sponsored Committee Documents, please contact ATIS at http://www.atis.org/doccenter.shtml.

### **ITU Numbering Documents:**

Copies of these documents can be obtained by purchasing them from the ITU. The details can be obtained by accessing the ITU web site at <a href="https://www.itu.int.">www.itu.int.</a>

E.164 - The International Public Telecommunication Numbering		
Plan		
E.164.1 Criteria and Procedures for the Reservation, Assignment,		
and Reclamation of E.164 Country Codes and Associated		
Identification Codes (ICs)		
E.164.2 – E.164 Numbering Resources for Trials		
E-164.3 - Principles, Criteria and Procedures for the Assignment and		
Reclamation of E.164 Country Codes and associated identification		
codes for groups of countries		

- E.165 Timetable for Coordinated Implementation of the full capability of the Numbering Plan for the ISDN era (Recommendation E.164)
- E.165.1 Use of escape code "0" within the E.164 numbering plan during the transition period to implementation of NPI mechanism
- E.166 Numbering plan interworking for the E.164 and X.121 numbering plans
- E.167 ISDN Network Identification Codes
- E.168 Application of E.164 Numbering Plan for UPT
- E.169 Application of Recommendation E.164 Numbering Plan for Universal I Numbers for International Telecommunications Services using Country Codes for Global Services
- E.190 Principles and Responsibilities for the Management and Assignment of E Series International Numbering Resources
- E.191 B-ISDN Numbering and Addressing
- E.193 E.164 Country Code Expansion
- E.195 0 ITU-T International Numbering Resources Administration

#### LNPA Working Documents Applicable to NANC

All documents are available on the Web at the LNPA website: www.npac.com

#### **Telecommunications Industry Association (TIA) Documents:**

Standards documents can be found listed at <a href="http://global.ihs.com">http://global.ihs.com</a> and <a href="http://glo

## **Glossary**

**AOCN** Administrative Operating Company Number

**ANI** Automatic Number Identification Information Integers

**ANSI** American National Standards Institute

**ATIS** Alliance for Telecommunications Industry Solutions

**BIRRDS** Business Integrated Routing and Rating Database System

CDRL Contract Data Requirements
CIC Carrier Identification Code

**CLEC** Competitive Local Exchange Carrier

**CLLI**<sup>TM</sup> COMMON LANGUAGE® Location Identification

**CMRS** Commercial Mobile Radio Service

**CO** Central Office

**COTS** Commercial Off-the-Shelf

**CRTC** Canadian Radio Television and Telecommunications Commission

CSCN Canadian Steering Committee on Numbering CTIA Cellular Telephone Industries Association

**ERC** Easily Recognizable (area) Code

**EFT** electronic file transfer

**FACA** Federal Advisory Committee Act

**FAQ** frequently asked question

**FCC** Federal Communications Commission

**FG A,B,C,D** Feature Group A, B, C, D **FRN** Federal Registration Number

**ILEC** Incumbent Local Exchange Carrier

IMG
 Issues Management Group
 INC
 Industry Numbering Committee
 IPD
 Initial Planning Documents
 ISP
 Internet Service Provider

ITU International Telecommunication Union

LARG Local Access Routing Guide
LATA Local Access Transport Area
LEC Local Exchange Carrier

LERG Local Exchange Routing Guide
LIDB Line Information Database
LLC Limited Liability Corporation
LNP Local Number Portability

MBI Mobile Block Identifier
MDN Mobile Directory Number
MIN Mobile Identification Number

MTE Months-to-Exhaust

NANC North American Numbering Council
NANP North American Numbering Plan

**NANPA** North American Numbering Plan Administrator

NASC Number Administration Service Center (Toll-Free 800/866/877/888

database)

NIIF Network Interconnection and Interoperability Forum NIST National Institute of Standards and Technology

**NPA** Numbering Plan Area (Area Code)

NPAC Number Portability Administration Center
NRUF Number Resource Utilization and Forecasting

OCN Operating Company Number
ONI Operator Number Identification
OSS Operator Services System

PA Pooling Administrator

PCS Personal Communications Service
PIP Performance Improvement Plan
POTS Plain Old Telephone Service

**PSTN** Public Switched Telephone Network

**SP** Service Provider

SPOC Single Point of Contact STrP Software Transition Plan

**TN** Telephone Number

TRA Traffic Routing Administration
TRS Telecommunications Relay Service

**TSB** Technical Standards Bureau

**VSC** Vertical Service Code